

1957



Florida State Board
of
Health

1957

ANNUAL REPORT

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Annual Report

State Board of Health

State of Florida

1957

The following statistical reports will be published separately:
SUPPLEMENT I — FLORIDA VITAL STATISTICS, 1957
SUPPLEMENT II — FLORIDA MORBIDITY STATISTICS, 1957

WILSON T. SOWDER, M.D.
STATE HEALTH OFFICER
JACKSONVILLE, FLORIDA

The Honorable CHARLES J. COLLINS, M.D. President,
Florida State Board of Health,
Orlando, Florida

Dear Dr. Collins:

I herewith submit the annual report of the Florida
State Board of Health for the year ending December
31, 1957.

Sincerely yours,

WILSON T. SOWDER, M.D.
State Health Officer

May 1, 1958
Jacksonville, Florida

His Excellency, LEROY COLLINS
Governor of Florida
Tallahassee, Florida

Sir:

I beg to hand you herewith a report of the Florida
State Board of Health for the period January 1, 1957,
to December 31, 1957, inclusive.

Respectfully submitted,

CHARLES J. COLLINS, M.D.
President

May 1, 1958
Orlando, Florida

Members of the
FLORIDA STATE BOARD OF HEALTH

CHARLES J. COLLINS, M.D., *President*

Orlando

T. M. CUMBIE, Ph. G.

Quincy

F. P. MEYER, SR., D.D.S.

St. Petersburg

SULLIVAN G. BEDELL, M.D.

Jacksonville

JOHN D. MILTON, M.D.

Miami

OFFICIAL STAFF FLORIDA STATE BOARD OF HEALTH

December 31, 1957

DIRECTORS

State Health Officer.....Wilson T. Sowder, M.D., M.P.H.
Assistant State Health Officer.....Albert V. Hardy, M.D., Dr. P.H.
Personnel Officer.....Robert G. Carter, B.S., Acting

Bureau of Finance and Accounts.....Fred B. Ragland, B.S.
Purchasing Agent.....G. Wilson Baltzell, B.S.

Bureau of Vital Statistics.....Everett H. Williams, Jr., M.S. Hyg.

Bureau of Local Health Service.....George A. Dame, M.D.
Assistant Director.....Wade N. Stephens, M.D., M.P.H.
Division of Public Health Nursing.....Ruth E. Mettinger, R.N.
Field Training.....George A. Dame, M.D., Acting

Bureau of Preventable Diseases.....Clarence M. Sharp, M.D.
Division of Industrial Hygiene.....John M. McDonald, M.D.
Division of Tuberculosis Control.....Clarence M. Sharp, M.D.
Division of Venereal Disease Control.....Clarence M. Sharp, M.D., Acting
Division of Veterinary Public Health.....James E. Scatterday, D.V.M., M.P.H.

Bureau of Special Health Services.....Lorenzo L. Parks, M.D., M.P.H.
Division of Hospitals and Nursing Homes.....Lorenzo L. Parks, M.D., M.P.H.,
Acting
Division of Chronic Diseases.....Lorenzo L. Parks, M.D., M.P.H.,
Acting
Division of Nutrition.....Lorenzo L. Parks, M.D., M.P.H.,
Acting

Bureau of Laboratories.....Nathan J. Schneider, Ph.D., Acting
Miami Regional Laboratory.....Warren R. Hoffert, Ph.D.
Orlando Regional Laboratory.....Max T. Trainer, M.S.
Pensacola Regional Laboratory.....Emory D. Lord, Jr., B.S.
Tallahassee Regional Laboratory.....Robert A. Graves, M.S.
Tampa Regional Laboratory.....H. D. Venters, B.S.
West Palm Beach Regional Laboratory.....Lorraine Carson

Bureau of Maternal and Child Health.....Edward L. Flemming, Ed.D.,
Acting

Bureau of Mental Health.....Melvin P. Reid, Ph.D., Acting

Bureau of Dental Health.....Floyd H. DeCamp, D.D.S.

Bureau of Entomology.....John A. Mulrennan, Sr., B.S.A.

Bureau of Sanitary Engineering.....David B. Lee, M.S., Engineering

Bureau of Narcotics.....Frank S. Castor, Ph.G.

Division of Health Information.....Elizabeth Reed, R.N., B.S.

COUNTY HEALTH OFFICERS

(As of December, 1957)

Alachua.....	Edward G. Byrne, M.D., M.P.H.
Baker-Nassau.....	George A. Dame, M.D., Acting
Bay.....	Albert F. Ullman, M.D.
Bradford-Clay-Union.....	A. Y. Covington, M.D., M.P.H.
Brevard-Osceola.....	J. Dillard Workman, M.D., M.P.H.
Broward.....	Paul W. Hughes, M.D., M.P.H.
Calhoun-Jackson.....	George A. Dame, M.D., Acting
Charlotte-DeSoto-Hardee.....	Bertram R. Provost, M.D.
Citrus-Hernando-Levy.....	Harold F. Bonifield, M.D., M.P.H.
Collier-Lee.....	Joseph W. Lawrence, M.D.
Columbia-Gilchrist-Hamilton.....	George A. Dame, M.D., Acting
Dade.....	T. E. Cato, M.D., M.P.H.
Dixie-Lafayette-Suwannee.....	Patrick H. Smith, M.D.
Duval.....	Thomas E. Morgan, M.D., M.P.H.
Escambia.....	John C. McSween, M.D.
Flagler-Putnam.....	Norman B. Edgerton, M.D., M.P.H.
Franklin-Gulf-Wakulla.....	Henry I. Langston, M.D., M.P.H.
Gadsden-Liberty.....	O. Wayne Yeager, M.D., M.P.H.
Glades-Hendry-Highlands.....	William F. Hill, Jr., M.D., Acting
Hillsborough.....	Frank V. Chappell, M.D., M.P.H.
Holmes-Walton-Washington.....	R. N. Nelson, M.D.
Indian River-Martin-Okeechobee-St. Lucie.....	Neill D. Miller, M.D.
Jefferson-Madison-Taylor.....	Harold H. Ring, M.D.
Lake.....	J. Basil Hall, M.D., M.P.H.
Leon.....	Joseph M. Bistowish, M.D., M.P.H.
Manatee.....	John S. Neill, M.D., M.P.H.
Marion.....	Frank J. DiTraglia, M.D.
Monroe.....	James L. Wardlaw, Jr., M.D., M.P.H.
Okaloosa-Santa Rosa.....	J. L. Turnage, M.D., M.P.H.
Orange.....	Wade N. Stephens, M. D., M.P.H. Acting
Palm Beach.....	C. L. Brumback, M.D., M.P.H.
Pasco-Sumter.....	Leo L. Burger, M.D.
Pinellas.....	William C. Ballard, M.D., M.P.H.
Polk.....	Chester L. Nayfield, M.D., M.P.H.
Sarasota.....	William L. Wright, M.D., M.P.H.
Seminole.....	Terry Bird, M.D., M.P.H.
Volusia.....	D. V. Galloway, M.D., M.P.H.

ORGANIZATIONAL CHART OF THE FLORIDA STATE BOARD OF HEALTH

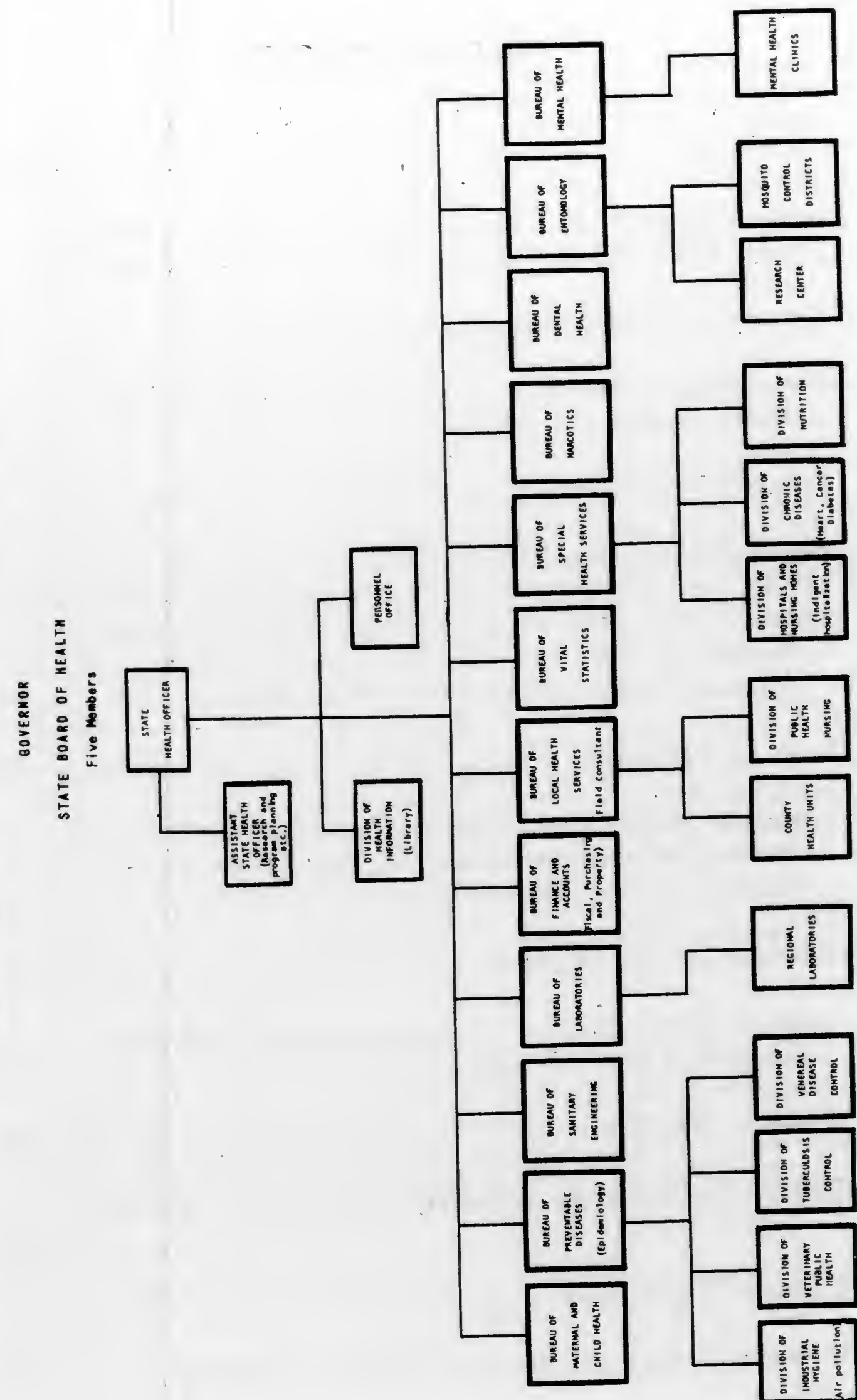


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GENERAL SUMMARY

WILSON T. SOWDER, M.D., M.P.H.
State Health Officer

The ability of an organization to keep abreast of changing times and trends and their effect on the public health, testifies to its progressiveness. The State Board of Health, it is hoped, has this ability. The appointment of a Coordinator of Research late in 1956, and the expansion of our research projects in 1957, shows our concern for more accurate background information on which to base new public health programs or to expand old ones. (A listing of the research projects in the State Board of Health will be found elsewhere in this section of the Annual Report).

The State Legislature has increasingly made the State Board of Health an advisor to, or an activator of, various programs in which it is interested and in which there are public health aspects. Many of these programs have advisory committees. The names of those serving on these various committees in 1957 will be found throughout this Report, according to their respective interests. The following are set up by legislative acts: Florida Air Pollution Control Commission, Florida Council on Training and Research in Mental Health, Dental Scholarship Advisory Committee, Hospital Licensure Advisory Council, Medical Scholarship Advisory Committee, and Advisory Committee for Hospital Service for the Indigent.

Many of the above groups require that the State Health Officer participate in their meetings or otherwise aid them in their problem solving. Also added to his other responsibilities are numerous requests from state and voluntary agencies and professional societies to attend their meetings. It has become increasingly obvious that the State Health Officer needed assistance, so the Board of Health approved the appointment of the Coordinator of Research as Assistant State Health Officer. His primary responsibilities, in addition to coordinating research, are: to assist bureau and division directors, county health officers and others in program development, especially in new fields; evaluate old programs and assist the State Health Officer in determining relative emphasis to be placed on all programs; review training activities; and to foster personnel recruitment.

The Merit System Classification Plan and Salary Schedule went into effect on July 1, 1957. Numerous inequities were protested. The attendance at Merit System Council meetings and the voluminous correspondence required to put the plan into operation have required much of the State Health Officer's time and effort. However, many problems concerning the Plan were resolved in 1957. The employment of a personnel technician, and a personnel officer in the Bureau of Local Health Service assisted greatly.

Employees of the State Board of Health and the County Health Departments were given the opportunity to participate in Federal Social

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Security which was included with State Retirement. Approximately 1174 of our employees chose to participate.

The communicable disease receiving the most attention in 1957 was Asian influenza. Florida was one of the first states to have laboratory confirmed cases of this strain of the disease. Apparently, about 10 per cent of Florida's population was affected. The epidemic was not as severe in Florida as elsewhere as the total recorded deaths for September, October, November, and December were not in excess of the number expected.

Four new health centers were completed during 1957, as compared to seven during 1956. However, 14 were under construction at the end of the year (including one regional laboratory). Attractive, efficient offices are most important aspects of a County Health Department's administrative set-up, for dingy, poorly located quarters do not enhance the public's opinion of this phase of local government.

The following are projects completed last year under the Federal Hill-Burton Hospital and Health Center Construction Program:

Projects Completed During 1957	Location	Federal Grant	Total Cost
Lakeland Health Center	Lakeland	\$ 33,441.60	\$ 83,604.00
Calhoun County Health Center	Blountstown	39,299.47	63,794.80
Escambia County Health Center	Pensacola	222,620.35	472,729.93
Walton County Health Center	Defuniak Springs	42,250.00	65,105.00

ACTIVITIES OF THE BOARD

During the year two changes occurred in the membership of the Board. John D. Milton, M.D. of Miami was appointed by the Governor, effective July 10, 1957 to replace Herbert L. Bryans, M. D., who had been a member of the Board for 16 years and its President during most of that period. Sullivan G. Bedell, M.D. of Jacksonville, a practicing psychiatrist, and for several years a member of the Council on Mental Health Training and Research, was appointed by the Governor effective July 17, 1957, to succeed Carl C. Mendoza, M.D. of Jacksonville.

Five meetings were held during the year. The date, place, and business transacted were as follows:

January 12 — Key West

1. By resolution authorized and directed the State Health Officer to proceed with the construction of a new regional laboratory in Orlando.
2. Approved methods of computing priorities for grants under Public Law #660; under which law the Federal Government gives grants to municipalities for sewage treatment plant construction.

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3. At a public ceremony received a historic watch from the J. Y. Porter family which was given to J. Y. Porter, M.D., the first State Health Officer, by the Jacksonville Auxiliary Sanitary Association in 1889.
4. Discussed septic tank problems in Monroe County with local citizenry.

February 12 — Jacksonville

1. Discussed and approved proposed Bills to be presented to the Legislature.
2. Discussed fees collected in county health departments; a committee of County Health Officers met with the Board to discuss the various types of fees collected.
3. Discussed revision of formula for determining state contributions to local health units for basic health services; whereby county contributions which are to be matched by State and Federal funds will include only the local funds from official local agencies.
4. Discussed the Palm Beach property owned by the State Board of Health and the furnishing of office space to the Board in the proposed West Palm Beach Public Health Center.

May 5 — Hollywood Beach

1. Approved proposed applicants for postgraduate training.
2. Discussed purchase of electroencephalographs for Duval Medical Center Clinic and Baptist Hospital Clinic. Lack of funds made purchase impossible.
3. Discussed educational requirements for local mosquito control directors.
4. Discussed the additional \$125,000 needed for the completion of the new building in Jacksonville to be inserted in the Appropriations Act.

July 28 — Jacksonville

1. Discussed the principal enactments of the 1957 Legislature affecting public health, the most significant of which was the substantially increased appropriation to the Board of Health, an increase of 58 per cent.
2. Discussed plans for budgeting new monies which included a number of new positions, salary increases and additional services.
3. Discussed the responsibilities and limitations of the State Board of Health in the administration of the Naturopathic Act of 1957.

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4. Discussed the duties and responsibilities of the State Board of Health and the Air Pollution Commission in regard to the Air Pollution Act of 1957.
5. Discussed the Indigent Hospitalization Program and the right of the Board to review the recommendations of the Advisory Committee on the Hospital Service for the Indigent.
6. Discussed the Hospital Licensing Program and the Nursing Home Licensure Program for the 287 nursing homes licensed in the state.
7. Discussed proposed amendments, rules and regulations in the Mosquito Control Program.
8. Approved Dr. Edward Flemming as Acting Director of the Bureau of Maternal and Child Health in the absence of Dr. R. W. McComas who was granted leave of absence.
9. Approved Dr. Melvin Reid as Acting Director of the Bureau of Mental Health upon the resignation of Dr. Laney Whitehurst.
10. Discussed and approved additions to the methods of computing priorities for grants under Public Law #660.
11. Signed agreement with Palm Beach County Commissioners regarding State Board of Health Building there.

October 13 — Jacksonville

1. Approved the appointment of Dr. Albert V. Hardy as Assistant State Health Officer for a period of one year and appointed Dr. Nathan Schneider as Acting Director of Laboratories in Dr. Hardy's absence from the Laboratory.
2. Approved the transfer of the Personnel Office and all its activities from the Bureau of Finance and Accounts to the Office of the State Health Officer.
3. Approved the appointment of Mr. Robert Carter as Acting Personnel Supervisor upon the resignation of Mr. Paul T. Baker.
4. Granted a one year leave of absence for Mr. John Wakefield, Sanitary Engineer V, so he could become Director of Water Resources under the Board of Conservation.
5. Discussed the recent Audit Report #4651 made by the State Auditor's Office. Approved the recommendation made by the State Auditor that the position of Internal Auditor presently set up in the Bureau of Finance and Accounts be transferred to the Office of the State Health Officer.

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6. Discussed and approved proposed revision of regulations of the Structural Pest Control Act of 1947 (as amended — Chapter 482, Florida Statutes 1955).
7. Discussed change in policy under methods of computing priorities for grants under Public Law #660.
8. Discussed nominating procedure by the Florida Hospital Association in regard to membership on Advisory Committee on Hospital Service for the Indigent.

LEGISLATION

The 1957 Legislature enacted a number of bills which directly concerned public health, and was interested in many others in which public health has an interest, such as acts affecting divorce proceedings, adoption proceedings, commitment proceedings, mental health and its several aspects, all drainage control districts, sanitation districts, mosquito control districts, etc:

A summary of legislation which was passed in 1957 which was pertinent to the State Board of Health follows:

Amendments to the Medical Scholarship Law.

Amendments to the Dental Scholarship Law.

Granting to the State Board of Health the power of eminent domain.

Amendments to the Mosquito Control Law.

Authorizing construction of insecticide research building at Vero Beach and providing for its construction.

Granting injunctive relief in the enforcement of Chapter 381.

Granting injunctive relief in the control of water pollution problems.

Authorizing the construction of a stream sanitation lab and providing an appropriation for its construction.

Amendments to the Narcotic Control Law.

Providing for the Control of Barbiturates and Amphetamines by the Bureau of Narcotics.

Repealing certain sections of Chapter 462 pertaining to the practice of Naturopathy and transferring the authority and duties of the Board of Naturopathic Examiners to the State Board of Health.

Affecting Naturopathic physicians with military service and GI training.

Establishing an Air Pollution Control Commission within the State Board of Health.

Appropriating \$150,000 for the purchase of Salk vaccine and poliomyelitis immune serum globulin.

It should also be noted that:

1. Our biennial appropriation for mental health purposes was increased from \$320,000 to \$1,002,000.
2. State matching funds for the support of county health units were increased from \$2,500,000 to \$3,500,000.
3. The program, "Hospital Service for the Indigent" which was created by the 1955 session of the Legislature with a \$500,000 appropriation for the express purpose of establishing the administration of the program, was adequately financed with a \$4,000,000 appropriation for the coming biennium. This will allow the State Board of Health to match county funds, dollar for dollar, for the hospital care of indigent as provided by the law.

PUBLIC HEALTH RESEARCH

ALBERT V. HARDY, M.D., DR. P.H.
Assistant State Health Officer and
Coordinator of Research

A Coordinator of Research for the State Board of Health was designated late in 1956. This is the report of gradual but satisfying developments during 1957.

The major activities to be reported are those of planning. For this purpose there were three conferences. Early in the year a Committee on Research met for a general discussion of possible plans. This was attended by staff members from the National Institute of Health and included representatives from the state's major educational institutions. In April, there followed a comparable conference for the discussion of Research in Mental Health. These together provided a stimulus with direction.

Attention was devoted first to the development of an interest in, and plans for, the development of research in some of the county health departments. Dr. T. E. Cato of the Dade County Health Department established a Division of Research and Program Development with Dr. Michael Takos as Chief. (Dr. Takos was previously the chief of the general clinical service). In that county there has been gratifying progress. Through the cooperation of Dr. Eugene Flipse of the University of Miami Medical School, six medical students for the three summer months were the first employees on the research program. Under Dr. Takos' guidance they began the assembling of data required for the *Study of Inmates of Nursing Homes in Dade County*. Simultaneously, they gave attention to other delimited problems; for example, *Tetanus in Dade County*, to the advantage of the county health department and with educational benefit to the student. Additional support

for the major project was provided by the Bureau of Mental Health, making available temporarily a social worker and the half-time services of a clinical psychologist. Gradually the plan for a three year study matured and at the end of the year this was being prepared for submission (as a research grant request) to the National Institutes of Health. Pending action on this, Dr. Takos received an allocation of "Demonstration Funds" from the Bureau of States Services of the U.S. Public Health Service and a second one from a private agency wishing to have the benefit of the *Study* in selected homes for Jewish inmates.

Due to a leave of absence for graduate study by a member of the Dade County Health Department staff, Dr. Takos during a portion of the year was serving as epidemiologist, in addition to his work as Chief of the newly formed division of Research and Program Development of the Dade County Health Department.

There was also an important development of a "Demonstration Project" to explore the means of providing better service to the mentally retarded in their homes. The total budget for this exceeds \$40,000 annually. The responsibility for the organization and guidance of this was placed in the Division of Research and Program Development. At the close of the year the needed staff was being assembled.

There were active developments also in Pinellas County. It was agreed in the first research conference that problems of the aged warranted particular attention in Florida. Soon thereafter the Pinellas County Health Department agreed to assume responsibility for initiating studies in this field. Dr. Waldo Treuting, Professor of Public Health Administration, School of Public Health, Tulane University, agreed to serve in a consultant capacity. The earliest decision was that an Assistant Health Officer, experienced in public health but active in gerontology or geriatrics should be found, (if possible) and employed to provide the needed leadership for the development of a service and study program to satisfy better the health needs of the aged. Through fortunate circumstances, Dr. Howard Carter became available in October and took on the assigned task. In December, a two-day planning conference took place at the Health Department in St. Petersburg and from that time definitive plans began to take form. It is hoped that the needed budgetary supplements are obtained through a NIH research grant.

Developments in Hillsborough County followed an entirely different line. In that area, there was wide community concern for evolving an effective integrated plan for the rehabilitation of the mentally ill. The Coordinator of Research contributed only in a limited manner. This was distinctly a community agencies' project. Consultive assistance of Mr. George Landsman, psychiatric social worker from the regional office of the USPHS was much appreciated. An organizational meeting to activate formulated plans is to be held early in 1958.

Lack of a well-qualified Assistant Health Officer in Palm Beach County has prevented research developments there as planned and desired by the Health Officer. This is the fourth large county in which

the local organization can advantageously consider the development of a substantial research program.

Looking to the future there is a recognized need and opportunity in Alachua County but adequate basic support can hardly be expected through the regular county health department budget. There is also an obvious need for public health research in a rural setting. Here also some means of providing the basic support will need to be found.

The Coordinator of Research continued to maintain close contact with research projects in the Bureau of Laboratories. The study of pulmonary disease due to *Atypical Acid-Fast Bacilli* proved particularly interesting and productive. It represented a joint effort of the Board of Health and the State Tuberculosis Board. Another cooperative study in tuberculosis involved the Miami Regional Laboratory and the Chest Unit of Jackson Memorial Hospital. (The various studies involving the Bureau of Laboratories are described elsewhere in this volume).

The Entomological Research Laboratory at Vero Beach is an outstanding research activity. It was given some support by the Coordinator of Research who was able to arrange for Dr. Dale Lindsay to visit it twice in an advisory capacity. An entomologist by training and currently the Assistant Chief of the Division of Research Grants of the National Institutes of Health, he was able to advise and assist effectively on a variety of matters.

It is recognized that certain other bureaus and divisions are also engaged in research or demonstration projects which are described in their respective reports.

The Coordinator of Research has served the Council on Training and Research in Mental Health. It has been his responsibility to receive, review and report on proposed studies. To date, six projects with an annual budget of \$29,150 have been approved. (See report of the Council elsewhere in this volume).

In the latter part of 1957, the National Institutes of Health provided a grant of \$22,140 annually to aid in the *Organization and Initiation of Public Health Research in Florida*. To date, this has been used to cover the cost of some consultants, travel, (including that to visit other Health Departments concerned with public health research) and for selected salaries where this will favor a desired development. Funds provide for a physician or scientist to obtain training and experience in public health research but there has been no selection for this position to date.

Articles by State Health Officer and Assistant State Health Officer:

- Sowder, W. T. Responsibilities of state agencies and voluntary agencies in providing services for the aged In Report of the Seventh Annual Southern Conference in Gerontology. 1957.
Hardy, A. V., Dublin, T. D. Research in State and Local Health Departments, J. A. M. A. 165: 1808-1813, Dec. 7, 1957.

RESEARCH AND DEMONSTRATION PROJECTS WITH APPROPRIATE ANNUAL COSTS BY AGENCY PROVIDING FUNDS

Virological Etiology of Acute Enteric Infections	
National Foundation for Infantile Paralysis	\$ 15,000
Armed Forces Epidemiological Board	6,000
Laboratory	
Rabies in Bats and Other Wild Life	
NIH U.S. Public Health Service	18,000
Laboratory and Veterinary P.H.	
Infections due to Atypical Acid Fast Bacilli	
School of Aviation Medicine	5,000
State TB Board	12,000
Laboratory and Epidemiology	6,000
Laboratory Surveillance of Poliomyelitis and Asian Influenza	
U.S. PHS (CDC) Contract	10,800
Laboratory	
Aerosol Technic in Bacteriological Diagnosis of Tuberculosis	
NIH, U.S. PHS	5,500
University of Miami Medical School	
Laboratory	
Rapid Bacteriological Diagnostic Procedures	
School of Aviation Medicine Contract	5,000
Laboratory	
Influenza in Pinellas County	
Epidemiology	1,000
Pinellas County Health Dept.	
Entomological Research Laboratory Basic Studies	
Entomology	155,000
Experimental Analysis of Migratory Behavior	
NIH, U.S. PHS	20,000
Entomological Research Laboratory	
Comparative Analysis of Gregarian Behavior	
NIH, U.S. PHS	19,500
Entomological Research Laboratory	
Biology of Brackish-Water Larvivorous Fish	
NIH, U.S. PHS	14,000
Entomological Research Laboratory	
Prevalence of Congenital Heart Disease among children in	
State School for Blind	
School of Aviation Medicine, Pensacola	
Heart Disease Control	2,500
Therapy in Ambulant Hypertensive Patients	
Duval Medical Center	
Heart Disease, Control	3,600
Incidence of Recurrence in known Rheumatics with and without prophylaxis	
Florida Heart Association	600
Heart Disease Control	2,500
Mental Health Research	
Council for Training and Research in Mental Health	29,000
Various agencies	
Volusia County School Mental Health Demonstration	
National Institute of Mental Health	17,000
Mental Health and Volusia County H.D.	

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Home Care of the Mentally Retarded Child Children's Bureau Dade County Health Dept.	40,000
Health Service for Migratory Agricultural Laborers Children's Bureau N.C.H. and Palm Beach County Health Dept.	54,900
Demonstration Program for the Care of the Premature Infant Children's Bureau M. C. H. and Jackson Memorial Hospital	50,000
The Characteristics of Nursing Home Populations University of Miami Medical School Dade County Health Dept.	3,600
Bureau of Mental Health	7,000
Time and Cost Studies of Public Health Nursing Regional Office U.S. PHS Nursing Division, Alachua & Pinellas County Health Depts.	consultation 1,000
Differentials in Male-Female Mortality NIH, U.S. Public Health Service Administration	10,000
Organization and Administration of Public Health Research NIH, U.S. PHS Administration	22,000

SCHOLARSHIPS FOR PROFESSIONAL EDUCATION

The Florida State Legislature, in 1955, created three scholarship programs which are administered by the State Board of Health.

Ten scholarships for the study of *medicine* are awarded each year upon the recommendation of a scholarship committee consisting of the deans of Florida's two medical schools and five physicians, designated by the President of the Florida Medical Association. This committee, in 1957, consisted of the following: Dean Homer F. Marsh, University of Miami; and Dean George T. Harrell, University of Florida, who served as ex-officio members. In addition, the following physicians were members of the Committee: T. Z. Cason, Jacksonville; Homer L. Pearson, Jr., Miami; John Milton, Miami; James T. Cook, Jr., Marianna; and Melvin D. Simmons, Sarasota.

Ten scholarships for the study of *dentistry* are awarded each year upon the advice of the State Board of Dental Examiners. The following dentists (members of the Board of Examiners) served on the 1957 committee: Frank T. Scott and R. P. Taylor, Jr., Jacksonville; D. J. Zimmerman, Ft. Myers; Richard Chace, Orlando; F. A. Finley, St. Petersburg; J. N. Pepper, Pensacola and F. F. Farver, Miami Beach.

Upon the recommendations of the Florida Council on Training and Research in *Mental Health*, scholarships or stipends, may be awarded each year for the training of five residents in psychiatry, six interns in clinical psychology, five psychiatric nurses and thirteen psychiatric social workers.

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A fourth scholarship program administered by the State Board of Health stems from the Federal Social Security Act of 1935. This program makes available federal funds to provide stipends to employees of the State Board of Health and its affiliated county health departments for *specialized professional training*. Great emphasis has been placed for many years on the training of the Board's permanent employees who show promise of professional growth.

Persons receiving scholarships in 1957 were:

MEDICAL

Robert E. Allen, Jr. ....Ft. Lauderdale	Ronald J. Scheib .....Hollywood
Ernest Austin .....Lake Wales	Leonidas M. Turner, Jr. ....Tampa
David M. Bleech .....Pahokee	Joseph A. Walton, Jr. ..Crescent City
Hoyt Horne .....Lake City	Robert A. Walton..Fernandina Beach
Edwin K. House, Jr. ....Pomona Park	Richard B. Welch ..West Palm Beach
John Franklin	
Mason, Jr. ....Jacksonville	

DENTAL

Richard K. Ames .....Daytona Beach	Peter B. Mills .....Miami
Jay Brenner .....Coral Gables	Bennie Thompkins ....Daytona Beach
Robert H. Carter .....Tampa	Harold T. Wilson .....Pensacola
William H. Filler .....Miami	Lester C. Young .....Tallahassee
Robert B. Hayling .....Tallahassee	Robert W. Butler .....Live Oak

MENTAL HEALTH

RESIDENTS IN PSYCHIATRY

Richard S. Wolf, M.D.
Wilford M. Provo, M.D.

RESIDENT IN CHILD PSYCHIATRY

Evan Katz, M.D.

CLINICAL PSYCHOLOGY

Laurence T. Carroll, Jr. ....Miami	Thomas D. Prutsman..Ft. Lauderdale
John G. Iosak .....Gainesville	Eve Lyn Weeks .....Coral Gables
Ann S. McColskey .....Gainesville	Betty Whitney .....Hallandale
Shirley Miller .....Miami	Charles F. Williams .....Miami

PSYCHIATRIC NURSING

Elizabeth W. Bradley....Chattahoochee	Betty Land .....Jacksonville
Alfreda R. Clark .....Miami	Tressa Roche .....Bartow
Margaret Dairwinn ....Chattahoochee	

PSYCHIATRIC SOCIAL WORK

First Year

Allan W. Russell.....Jacksonville
James P. Love .....Jacksonville
Robt. G. Marshall.....St. Petersburg
William E. Neet .....St. Petersburg
Andre L. Johnson .....Tallahassee
Yvonne Moreno .....Miami
Eldredth Melton .....Ft. Lauderdale
Raymond L. Logue ....St. Petersburg
Carolyn Collins .....Jacksonville

Second Year

Arthur W. Bothman ....St. Petersburg
Lillian R. Craigo .....Ruskin
David N. Hansen, Jr...Ft. Lauderdale
Naomi Knepper .....Sarasota
Donald Steiss .....Tampa
Martha Watkins .....Sebring
Grace Bivans .....Miami

PUBLIC HEALTH PERSONNEL

David L. Crane, M.D.	Health Officer	Dade County
Charles W. Long, Jr., M.D.	Health Officer	Bureau of Local Health Service
*T. W. Weeks, Jr., M. D.	Health Officer	Highlands-Glades-Hendry
Margaret H. Dorman	Public Health Nurse	Pinellas County
Grace M. Gallagher	Public Health Nurse	Dade County
Hazel A. Key	Public Health Nurse	Sarasota County
Lola Lee Lake	Public Health Nurse	Polk County
Virgie M. Pafford	Public Health Nurse	Alachua County
Anna J. Sawyer	Public Health Nurse	Monroe County
William J. Farrell	Sanitarian	St. Lucie County
Charles W. Holmes	Sanitarian	Sarasota County
John O. Welke	Sanitarian	Dade County
Jack R. Wilson	Sanitarian	Pinellas County
Vincent D. Patton	Sanitary Engineer	Bureau of Sanitary Engineering
Esther J. Smith	Mental Health Worker	Bureau of Mental Health

* Withdrew 11/18/57 on account of ill health.

PERSONNEL OFFICE

ROBERT G. CARTER,
Acting Personnel Officer

The year 1957 was a significant one for the Personnel Office, with the advent of the Merit System's new Pay and Classification Plan going into effect on July 1. Continuing progress in the field of personnel administration was noted during the year. In keeping pace with the rapid growth of the organizational strength of the State Board of Health, the Personnel Office expanded in size and function so as to maintain the utmost efficiency and service to all units of the agency.

Colonel Paul T. Baker retired after twelve years of diligent service as the State Board of Health's first official Personnel Officer. His thoughtfulness and willing manner will be missed by all.

The Personnel Office increased its staff with a new Personnel Technician and the placement of a new Personnel Officer in the Bureau of Local Health Service to meet the increasing needs of the county health units.

The Merit System's new Pay and Classification Plan was put into effect on July 1. All employees working under the Merit System at that time were brought into the new plan with the Minimum Implementation Formula, which was designed to adjust salaries in accordance with the new class specifications for each position.

A referendum regarding Federal Social Security was held on November 25, 1957 for all state employees participating in the State and

County Officers' and Employees' Retirement System. The referendum passed by a majority vote, thereby bringing about the inclusion of Federal Social Security with State Retirement. All employees were given the opportunity of choosing between State Retirement with Social Security and State Retirement without. Approximately 1,174 of our employees chose to include Social Security with their State Retirement, and employees of that group who were participating in the Retirement System on January 1, 1956 received Social Security coverage retroactive to that date.

Recruitment was vigorous throughout the year, thereby enabling the State Board of Health to obtain much needed professionally trained personnel to staff our expanding organizational structure in line with Florida's rapidly increasing population. However, some vacancies were existent during the year in the various professional classifications: health officers; psychiatrists; clinical psychologists; mental health workers; psychiatric social workers; public health nurses; sanitary engineers and sanitarians. Shortage in these classifications was created by lack of qualified applicants and the existing salary ranges in competition with the wage scale of private industry. Fortunately, the sub-tropical climate and other advantages of this state are attracting large numbers of new residents and our recruiting problems are considerably less difficult than is the case in many neighboring states.

During the latter part of the year, the Personnel Office was transferred from the Bureau of Finance and Accounts to the office of the State Health Officer because of the increasing importance of personnel administration and the responsibility of the Personnel Officer to the State Health Officer.

Throughout the year, personnel records were continually kept on employments and terminations, classifications, service ratings, leave, history data, and various other functions pertaining to personnel matters.

Records of in-service and postgraduate training of employees were maintained and the application of regulations governing such training was insured.

Prompt action was taken after each Merit System examination to regularize the Merit System status of each provisional employee. Employees were notified without delay, upon attainment of permanent status.

At the end of the year, sixty-six of the state's sixty-seven counties had organized county health departments, which were operating under the Merit System.

On December 31, 1957, there were 1735 state employees (including those in county health departments) and 16 Federal employees on loan to this agency. On December 31, 1956, there were 1584 state employees and 17 Federal employees.

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During the year, there were 555 employments and 404 separations, including part-time personnel. The principal reasons for separations include marriage, pregnancy, transfer of husbands from the area, completion of projects for which employed and acceptance of more profitable employment elsewhere.

TABLE 1
NEW EMPLOYMENTS, SEPARATIONS, AND
TURNOVER RATES BY CLASSIFICATION

Classification	New Employment	Separations	Turnover
Total	555	404	24.34%
Health Officers	22	25	39.68%
Sanitary Engineers	9	2	7.14%
Sanitarians	47	25	11.06%
P. H. Nurses	101	59	13.35%
Clerical	157	143	35.48%
Other	219	150	29.01%

*Turnover Rate—Separations Divided by Average Number of Employees

On December 31, 1957 the Merit System status of the State Board of Health personnel was as follows:

Permanent and Probational	1,398
Provisional	69
Temporary	0
Emergency	25
Exempt and Part-time	243
TOTAL	1,735

Postgraduate training on a stipend basis for one full academic year was successfully completed during 1957 by 4 health officers; 4 public health nurses; 4 sanitarians; 1 health educator; 1 biologist; and 1 statistician.

GENERAL SUMMARY 15

TABLE 2
DISTRIBUTION OF PERSONNEL—STATE BOARD OF HEALTH
(OTHER THAN COUNTY HEALTH DEPARTMENTS)
DECEMBER 31, 1957

Bureau or Division	Physicians	Nurses	Dentists	Sanitary Engineers	Sanitarians	Laboratory Personnel (Professional and Technical)	Health Educators	Nutritionists	Statisticians	Clerical, Administrative and Fiscal	Maintenance and Custodial Workers	Other	Part-Time (All)	Federal Employees	Total
Office of the State Health Officer	3									18		1	2		15
Administration	3		2				1			11		1	2		24
Dental Health										8	14	8			30
Finance and Accounts										19	14	2			41
Health Information										2	14	3	1		13
Jacksonville						40				2	3	1			65
Miami						14				1	3				20
Orlando						3				1	2				7
Pensacola						3				1	2				6
Tallahassee						3				1	2				6
Tampa						10				1	2				19
West Palm Beach						4				1	1				6
Total	3(a)	5	2	2	2	77	2			15	31	4	1		129
Bureau		1								2					3
PH Nursing		1								7					7
Inservice Training		6								4					10
Total	3	16		1			1			10	1		4		22
Maternal and Child Health		4								7			2		17
Mental Health										3					11
Narcotics										2					5
Bureau	2									1					4
Industrial Hygiene	1									9					10
Tuberculosis Control	1					2				1					4
Venerical Disease Control										2					2
Veterinary Public Health	4				2	2				17					22
Total				21	2	4				14			1		54
Sanitary Engineering										2					6
Bureau and Hospitals and Nursing Homes	1									5					6
Special Health Services										1					1
Chronic Diseases										2					2
Nutrition										8					8
Total				2	2	1				15	5		3		21
Entomology										4					6
Vital Statistics										11					11
Grand Total	11	11	2	23	14	84	4	5	3	172	51	123	16	12	531

(a) One on Academic Leave

TABLE 3

DISTRIBUTION OF PERSONNEL IN COUNTY HEALTH
DEPARTMENTS — DECEMBER 31, 1957

COUNTY	Physicians	Nurses	Dentists	Sanitary Engineers	Sanitarians	Laboratory Personnel (Professional and Technical)	Health Educators	Nutritionists	Statisticians	Clerical, Adminis- trative and Fiscal	Maintenance and Custodial Workers	Other	Part-Time (All)	Federal	Total
Alachua	2	13			5					6	1	3	4		34
Baker		1			1					1					3
Bay	1	7			4					2		3	1		18
Bradford		2			1					1			1		5
Brevard	1*	6			2					1		2	2		14
Broward	1	15	1	1	8					10	1	7	3		47
Calhoun		1			1					1			1		4
Charlotte		1			1					1					3
Citrus	1*	1			1					2		1			6
Clay	1*	3			2					1			1		8
Collier		1			2					1		1			5
Columbia		2			2					1					6
Dade	6(a)	89	1	3	43		1			35	5	6	13	1	203
DeSoto		1			1					1		1			4
Dixie		1			1					1					2
Duval	1	12			6	1				4	1	7	4		36
Escambia	2	13			8					12	1	4	6	1	47
Flagler		1			1					1					3
Franklin	1*	1			1					1			1		5
Gadsden	1*	5			2					2		1	1		12
Gilchrist		1								1					2
Glades										1					1
Gulf		2			1					1			1		5
Hamilton		1			1					1			1		4
Hardee	1*	2			1					1					5
Hendry		1								1					2
Hernando		1			1					1					2
Highlands	2*	2			2					1			1		8
Hillsborough	5	43	1	2	23	1				23	16	24	9		147
Holmes		1			1					1		1			5
Indian River		3			1					1					5
Jackson		2			2					2	1				10
Jefferson		5			1					1			1		4
Lafayette		1			1					1					3
Lake	1	5			3					2			1		12
Lee	1*	5			2					2			1		11
Leon	2	8			4					7	2	8	1		32
Levy		2			1					1		1			5
Liberty		1			1					1					2
Madison	1*	2			1					2			1		7
Manatee	1	4			3					4		3	1		17
Marion	1	4			2		1			2		1	1		11
Martin		1			1					1					4
Monroe	1	6			2					3	2	2	1		17
Nassau		3			1					1		1			6
Okaloosa	1*	3			2					2			1		9
Okeechobee		1								1					2
Orange		14	1		7					12		12	3		49
Osceola		2			2					1			1		6
Palm Beach	1	17	1	1	9					13	2	9	3	2	58
Pasco	1*	2			1					1					5
Pinellas	4	38	1	1	21	1	1			24	3	6	2		102
Polk	2	25	1	1	10		1			13	1	5	3		64
Putnam	1*	3			1					1					9
Santa Rosa		3			1							2			7
Sarasota	1	10			5					5		2	1		24
Seminole	1	3			2					1			2		9
St. Lucie	1*	2			4					2		1	1		11
Sumter		1			1					1			1		4
Suwannee	1*	2			1					1			1		6
Taylor		1			1					1					4
Union		1			1					1					3
Volusia	1	16	1		6	1				5	2	7	2		41
Wakulla		1								1					2
Walton	1*	2			1					2		1	1		8
Washington		2			1					1			1		5
Total	50	432	8	9	223	4	4			238	39	122	87	4	1220

*Serves two or more counties—See Roster of County Health Officers.
(a) One on Academic Leave.

TABLE 4

TERMINATIONS AND TURNOVER RATES BY CLASSIFICATION
FOR THE FLORIDA STATE BOARD OF HEALTH AND COUNTY
HEALTH UNITS, CALENDAR YEAR 1957
(FULL-TIME EMPLOYEES ONLY)

CLASSIFICATION	Total	SALARY									
		Under 150	150- 199	200- 249	250- 299	300- 399	400- 499	500- 599	600- 699	700- 799	800- Plus
TERMINATIONS — 1957											
Total — All Employees.....	341	6	85	74	64	73	14	3	9	6	7
Physicians	17								5	5	7
Sanitary Engineers	2								1	1	
Sanitarians	24				7	15	2				
Public Health Nurses.....	55				27	25	3				
Prof. Laboratory Workers...	13			2	6	4	1				
Clerical, Admin. & Fiscal..	128		52	53	16	7					
All Others	102	6	33	19	8	22	8	3	3		
TURNOVER RATE — (ANNUAL PERCENTAGE)											
Total — All employees.....	21.8	52.2	54.3	30.8	20.0	13.6	9.7	5.8	28.6	25.5	14.1
Physicians	28.1								62.5	52.6	16.3
Sanitary Engineers	6.7								15.4	18.2	
Sanitarians	10.7				29.2	11.1	3.8				
Public Health Nurses.....	12.9				18.3	12.4	12.8				
Prof. Laboratory Workers...	15.4			12.9	41.4	14.8	7.7				
Clerical, Admin. & Fiscal..	31.4		73.8	31.5	15.8	13.1					
All Others	30.8	57.1	41.3	35.5	24.6	32.4	19.0	15.0	20.7		

DIVISION OF HEALTH INFORMATION

ELIZABETH REED, R.N., B.S.
Director

There is more interest than ever before in health education and in employing health educators for the staffs of county health departments. At the end of the year two vacancies for health educators in county health departments existed, and several more counties made inquiries concerning the feasibility of employing one. The concern with chronic disease and mental health programs has pointed up the fact that only when health education is considered an integral part of the program, will they be successful.

An intensified effort was made to be of more service to the various bureaus and divisions this year and to complement their activities with this division's special services.

It is hoped that eventually the mental health worker program will be more closely allied to the activities of this division, since many of their opportunities lie in the field of health education. Assistance was given them in the supplying of certain materials, as well as orienting them to the services available to them. This desirable liaison will be further strengthened in 1958.

AUDIO-VISUAL AIDS

An increasing amount of time was given to assisting various personnel of the State Board of Health and the county health departments in planning specific sanitarian trainee and orientation programs, technical assistance to TV programs, and previewing new materials. The heart disease control program was assisted by the circulation of professional materials for physicians. A more efficient method of record keeping was instituted in an effort to meet the constant demand for audio-visual materials.

The following figures give an indication of the activities:

Number of aids circulated	5,264 - (3 per cent increase)
Number of times aids were used	11,671* - (5 per cent decrease)
Number of persons in audiences	651,888* - (2 per cent decrease)

* Estimated. Report cards are not received from all borrowers.

Not included in the above figures are:

13 films used in telecasts seen by an estimated 500,000.

44 radio transcription discs heard by approximately 1,800,000.

An effort was made to stimulate interest in audio-visual materials other than 16mm films. However, motion pictures still constituted 89 per cent of the total circulation.

The budget for audio-visual aids is still not a realistic one. Over 50 per cent of all films in 1957 were purchased by other bureaus and divisions. Since all of these were categorical funds, the inevitable consequence is that some subjects are much better represented in the library's collection than are others who do not have the benefits of such "windfalls."

Repairing and cleaning of projection equipment and loaning items to State Board of Health and county health department personnel consumes much time. Over 300 requests were made for this service.

As usual, the summer months are spent in cleaning up and inventory and 40 aids were removed from circulation because they were damaged, obsolete, surplus or recalled by the agency issuing them.

EXHIBITS CONSULTANT

During the past year the exhibits consultant averaged better than one-per-day-of-work units consisting of exhibits, displays, signs, charts, maps, etc. (total of 296) plus 40 conferences, 16 field trips, assisting with exhibits at 11 fairs and meetings. This was in addition to talks, movie showings, assisting with a television series and other routine duties. Activities were stepped up because the consultant took over many of the duties of the part-time artist who resigned and whose position was abolished. Free lance artists do special assignments.

HEALTH NOTES

There seems to be an ever-increasing interest in *Florida Health Notes*, a monthly bulletin (10 times a year). The mailing list continues to grow. During 1957 the following subjects were discussed: mental health, overweight, chemistry laboratory, health of school children, vital statistics, meat, trailer parks, civil defense, county health departments and a simplified annual report.

A writer was employed to assist with *Health Notes* as well as other publications. It is hoped that even more attractive and useful materials, through the use of effective modern methods of layout and design, will be the result of his employment.

LIBRARY

BARBARA J. BECKNER, B.A., M.S.L.S.
Librarian

Highlights of 1957 were the arrival of a long-awaited charging desk and the formation of a library committee to act in an advisory capacity

to the librarian. Decisions reached by the committee were:

1. Limit holdings of any journal to the last 25 years.
2. Defined the purpose of the library.
3. Assigned to the various bureaus and divisions specific amounts of money that could be spent in purchasing special interest library materials.

Monthly list of additions to the library were sent to all bureaus and divisions and county health departments . . . Medical Library Exchange of duplicate journals and books were mailed to 36 states and six foreign countries for a total of 896.

Circulation for 1957 was: books, regular loan, 1511; indefinite loan, 1830; periodicals, 9914; pamphlets, 126; total, 15,481. The library borrowed 72 items from other libraries and loaned them 19 items. The National Library of Medicine loaned this library 16 microfilms and 10 photostats.

Answering all types of questions from "Can you give me the address of Dr. Blank in Savannah, Georgia?", to "Please prepare a bibliography of all the articles written in the past 10 years on the tranquilizing drugs," kept the staff busy. Over 1760 reference questions were answered and 35 bibliographies compiled.

A total of 1163 books were cataloged and added to the library last year. Various bureaus and divisions were asked to check over the books in their field that were in the library and pull out those they thought were too old to be of any value to the library. Thanks to their splendid cooperation, 876 books were withdrawn. Added to the vertical file, were 314 pamphlets. The number of books and bound journals in the library at the end of 1957 was 14,274.

PAMPHLETS

Pamphlets are still a popular source of health information, and it is hoped, of assistance to health education, since approximately 250,000 were distributed in 1957. Mental health leads the list as it has done now for several years. New pamphlets are added as the need arises. Approximately 10 "standard" pamphlets were revised and reprinted in 1957.

PRESS SECRETARY

The duties of the press secretary are, as the title implies, to handle relations between the State Board of Health and the news media represented by the newspapers, wire services, and television and radio stations. Besides writing news releases for general distribution and for selected publications, the press secretary was called upon a number of times to cover or assist in such meetings as the Florida Public Health Association Convention and the Postgraduate Obstetric-Pediatric Seminar in Day-

tona. Assistance was also given in the preparation of Health Notes, the Florida Intelligencer (a newsheet for personnel), various pamphlets and radio and TV scripts. The press secretary gave a number of talks on press relations before orientation groups and sanitarian classes. A large number of photographs were taken. Several articles were prepared on request for technical publications.

OTHER ACTIVITIES

ORIENTATION PROGRAMS

Mrs. May Pynchon, part-time health educator on the staff of the Bureau of Maternal and Child Health, reviewed and revised the orientation program during the latter part of the year. An endeavor was made to improve the format and presentation of these highly valuable sessions. A long waiting list is now on file of employees of county health departments and the State Board of Health, and related agencies, who wish to attend. Four orientation programs of three days, and two one-day affairs were held.

WORKSHOPS

Two of the staff assisted the psychologist-consultant of the Bureau of Maternal and Child Health in the conduct of a number of workshops on human relations and leadership training. (See the report of this Bureau elsewhere in this volume.)

TEACHERS' PROJECT

The second "Teachers' Project" was initiated in the summer of 1957. (See the 1955 Annual Report). Mrs. May Pynchon headed up this activity, assisted by members of this division's staff. Twenty-six teachers from 14 counties participated, attending one of the following universities: Florida State University, University of Florida or University of Miami. During the four-weeks' project, the participating teachers spent over two weeks in their home counties, learning about the activities of the county health department and related health agencies in their communities. Plans were made to expand this program in 1958.

FOREIGN VISITORS

Twenty-four visitors from foreign countries were received last year. Assistance was given in planning for their experience or trips while in the state. These students came from fifteen different countries and presented a variety of public health backgrounds.

TV

The division jumped into the TV-producing field by being responsible for seven one-half hour shows on a newly-opened station and assisting and consulting with those responsible for the six other programs in the 13-week schedule. The disproportionate amount of time required to use this media caused it to be abandoned temporarily while the staff caught its breath. Plans have been made to use the new community station in Jacksonville (WJCT) when it opens in the spring of 1958, as well as to use the commercial stations for one-shot infrequent presentations.

RADIO

Radio transcription discs were prepared with 24 spot announcements on them concerned with a variety of Florida's health problems. The voices were members of this division's staff. They were then offered to specific county health departments. Apparently they have had wide usage. It is anticipated that more will be prepared in 1958.

MISCELLANEOUS

As usual, the director and the staff health educator engaged in many other activities. They attended meetings of voluntary and official health agencies, professional organizations, PTA's, educational associations, teachers' groups, civic clubs, etc. The director appeared before numerous groups as a speaker. Consultative visits were made to the five local health educators. A meeting was held with this group in February and it is planned to make it an annual affair.

Articles by staff members:

Reed, Elizabeth. Continuity in Nursing Care. R.N. 20:58-59, June 1957

Fulton, David K. Quarantine with Shotguns. Dickey Data. Vol. 17 #1

BUREAU OF LOCAL HEALTH SERVICE

GEORGE A. DAME, M.D., Director
WADE N. STEPHENS, M.D., M.P.H.,
Assistant Director

ORGANIZATION

The organization of the county health units remains the same as it was last year. There are nineteen single county units, eight two-county units, nine three-county units and one four-county unit. St. Johns County remains the only one of the sixty-seven that does not have a health department. In late 1956 and early 1957 a sanitarian and a stenographer were employed by St. Johns County. This is a great step forward, but it is not a county health department under the meaning of the enabling act.

At the end of the year there were twelve hundred sixteen employees on the payroll of the sixty-six county health departments. This represents an increase of seventy-one over last year.

INCREASE IN FUNDS

This increase in the number of employees resulted in improved public health programs throughout the state. It was made possible by larger state and local appropriations.

An increase in funds by the legislature from \$1,250,000 to \$1,750,000, earmarked for county health units, resulted in allocations to the counties on a basis of 101.36 per cent of the master formula, a gain of 22.86 per cent over the previous year.

The total budget for all county health units amounts to \$6,302,367 or \$1.647 per capita, of which the counties contributed \$4,084,479 or \$1.067 per capita, the state \$2,022,832 or 52.8 cents per capita (includes State Mental Health Funds), and federal funds amounting to \$195,056 or 5.09 cents per capita. The population estimate used was prepared by the Bureau of Vital Statistics as of July 1, 1957.

MERIT SYSTEM

The new Merit System was installed July 1, 1957. Almost every employee received a salary increase at this time. The difficulties that are inherent in changing over from a Merit System based largely on individual ability to one based on allocation of positions with reference to population served and number of employees were encountered. In spite of the salary increases, the fact that promotion was made more difficult resulted in a great deal of discontent among county health

department employees. Some resigned on this account. For example, four county health officers resigned to take positions in other states, and one to go into private practice. Two of these gave Merit System regulations as their reason for leaving, and the others named this as a contributory factor. These were all among our better men. Three of them had received Master's degrees in Public Health at state expense.

The new Merit System provides less flexibility in starting salaries than was possible under the old system. This has resulted in increased difficulty in recruitment in practically all categories. At the end of 1957, for example, there were four county health units without health officers. The Columbia-Hamilton-Gilchrist Unit has been vacant since June 30, 1957; Calhoun-Jackson since July 8; Orange since September 1; Nassau-Baker since October 1. The principal reason for delay in filling the positions is that starting salaries were too inflexible.

As this report is being written, increased starting salaries for most health officers have been granted by the Merit System. There is every indication that as times goes on other controversial points will be settled by discussion, and the Merit System will protect both employee and employer as was intended by the Governor and the Legislature.

MIDWIVES ON THE DECREASE

When the last midwife in Citrus County ceased to practice during 1957, there were seven counties in the state without midwives. These counties have enough doctors and hospitals to take care of all the births. It is hoped that eventually the same will be true of all the counties.

TRAINING

During 1957 three groups of sanitarians were given the twelve week training course which a year earlier had been moved to Jacksonville. There were seven, four and seven sanitarians respectively in the classes from the following twelve counties: Alachua 2, Dade 4, Duval 1, Escambia 1, Flagler 1, Madison 1, Orange 1, Osceola 1, Pinellas 1, Polk 3, Seminole 1, Volusia 2. In addition a sanitarian from the Kingdom of Jordan spent a short time training with one of the groups.

The first eight weeks of training were in Jacksonville. During this time one of the sanitation consultants devoted full time to training activities. The other two staff sanitation consultants and selected members of the Board of Health staff helped to make the training fruitful.

The final four weeks of training were used as an internship for the sanitarian trainees. Each one spent two weeks in a large county, a week in a medium sized county and a week in a small county. During the period in the counties the trainees operated as members of the health units, profiting from the association with the unit staff members. Six

counties cooperated: Dade, Levy, Palm Beach, Pinellas, Polk and St. Lucie.

During the year permanent quarters, adequately furnished, were provided for the sanitarians training course for the first time. In addition more adequate living allowances were given the trainees. Adjustments were made in the format of the training to give the sanitarians in training more basic science to cover gaps in their previous academic pursuits.

Eight nurses attended the training center in Alachua County in two groups of three and five respectively. They were from the following seven counties: Alachua 1, Bay 1, Escambia 2, Hillsborough 1, Lake 1, Nassau 1 and Polk 1.

Special training was provided for the nurse director of training and for the staff nurses of the Alachua County Health Unit in order to improve the quality of teaching. This was accomplished with the assistance of the University of Florida Center for Clinical Services.

The training program was changed to allow the director to work more closely with individual Nurse trainees to increase the potential of their native skills. Instruction in human relations and participation in specialized programs were emphasized, remaining always within the framework of the generalized public health nursing program. The use of trainees to provide services was reduced.

There was no organized pre-employment or on-the-job training for health officers during 1957. It is hoped to remedy this deficiency in 1958.

HEALTH OFFICERS CONFERENCE

The tenth annual Health Officers Conference with the State Board of Health was held February 11, 12 and 13. The following officers were elected for the coming year: Dr. Chester L. Nayfield, Chairman; Dr. James F. Speers, Vice-Chairman, Dr. Warren T. Weathington, Secretary. The following Chairmen of Committees were appointed: Dr. Edward G. Byrne, State-Local Relations; Dr. Norman B. Edgerton, Preventable Diseases; Dr. Wayne Yeager, Maternal and Child Health; Dr. Warren T. Weathington, Records; Dr. Merwin E. Buchwald, Environmental Sanitation; Dr. Frank DiTraglia, Public Health Nursing; Dr. William C. Ballard, Special Health Services; Dr. Henry I. Langston, Mental Hygiene.

POSTGRADUATE TRAINING

The following health officers received the degree Master of Public Health in June, 1957: Dr. William C. Ballard, Tulane University; Dr. J. Dillard Workman, University of North Carolina; Dr. Johnson L. Turnage, Tulane University; Dr. John S. Neill, Johns Hopkins University.

There are now 23 county health officers and two assistant health officers who have had this training.

In September these health officers left to take postgraduate training: Dr. Charles W. Long, University of North Carolina; Dr. T. W. Weeks, University of North Carolina; Dr. David L. Crane, Tulane University. Dr. Weeks was forced to leave school in November because of poor health.

Four sanitarians are currently taking postgraduate training in public health leading to the Master of Public Health degree and will return to their respective counties in June 1958.

Six nurses are currently taking postgraduate training at schools of public health and will return to their respective counties in June 1958. In addition one nursing consultant from the Division of Public Health Nursing is currently attending a school of public health.

NEW DIPLOMATES

During 1957 Dr. Paul W. Hughes, Dr. Chester L. Nayfield and Dr. Wade N. Stephens received certificates from the National Board of Preventive Medicine. Twelve of Florida's county health officers are now diplomates.

RESIDENCIES IN PUBLIC HEALTH

Palm Beach County was approved as a residency training area November 1, 1957. There are now five counties in Florida where young doctors can receive approved early on-the-job training in public health.

NEW DEVELOPMENTS IN THE BUREAU

The Food Handlers Training Program was transferred from the Bureau of Sanitary Engineering to this bureau on July 1, 1957. The first course under the direction of the consultant staff was given at the Southwest Florida Tuberculosis Hospital on December 10, 1957. It is hoped to develop a flexible and modern course for food handlers, organized and staffed locally with materials and consultation from this bureau.

Five counties are already operating permanent training courses for food handlers. A total of 5653 food handlers were issued certificates for attendance at these schools during the year.

The consultant staff, in cooperation with the nursing consultants, the Bureaus of Laboratories and Mental Health, undertook an evaluation of all services given by the Volusia County Health Department at the request of its director. The report is not yet complete. This study will be used as the basis for developing a plan for making short reviews of individual health departments on request. The health officer can use such a report to excellent advantage in future planning.

On September 1, 1957, Dr. Wade N. Stephens was appointed assistant director of this bureau. He received his Master of Public Health degree from Tulane University in 1953 and is a diplomate of the American Board of Preventive Medicine. He has been county health officer in Flagler, Putnam and Orange Counties. Mr. Herman Leslie High was employed as Personnel Officer in the bureau in October. He holds a Master of Arts degree in Counseling Psychology from Florida State University. These two new employees are already of great benefit to the bureau.

COUNTY HEALTH DEPARTMENT ACTIVITIES

Many county health department directors reported unusual or outstanding achievements during 1957. Some of these are included below. It is worthy of note that many of these show increasing support for higher sanitation standards by local governing bodies.

BRADFORD: A. Y. Covington, M.D., M.P.H.

"For the past twelve years our greatest problem in sanitation has been an open garbage dump for the City of Starke. This situation was corrected the past year through instigation of a Bradford County Mosquito Control Program in cooperation with the State Arthropod Program. With funds appropriated by both the City of Starke and the Bradford County Commission, adequate equipment including a TD9 tractor, was purchased. We now have a sanitary landfill in the city, operated in an approved manner. These funds also resulted in the expansion of the present Mosquito Control Program.

The second largest problem has been inadequate sewage disposal. This has been reduced by extension of present sewer lines for more than six thousand feet in the City of Starke and installation of a new lift station. A filter bed sewage system was installed in a new large tourist court.

The town of Hampton started a sanitary landfill for garbage disposal, financed by municipal funds under private contract. This project will be improved during the next year in cooperation with the County Mosquito Control Program.

Prior to 1957, there were no swimming pools in Bradford County, but as of December there are now five approved filter tank type pools."

BROWARD: Paul W. Hughes, M.D., M.P.H.

"Major activities during the past year indicate a greater public interest in health services on a wide front. Plans are being discussed by leaders to provide public water, sewers, garbage collection and incineration on a county-wide basis. The largest city has now begun a multi-million dollar expansion of its sanitary sewer system. Two cities are actively concerned with slum clearance.

Local health appropriations increased approximately 50 per cent. A new expansile-type health building is to be constructed in 1958. The Mobile Health Unit is operating full time serving outlying areas of the county including a special program for migrant farm workers.

A Board of Health and Welfare was created in 1957. This board meets regularly every three months to advise on policy matters."

CITRUS: Harold F. Bonifield, M.D., M.P.H.

"The County Health Department with offices in Inverness, is continuing to show evidence of public support. The Tuberculosis Association and Cancer Society jointly purchased a film projector and screen, and the Inverness Lion's Club has purchased a light meter. These will be used in a continuing health education program.

The year 1957 ended the midwife program in the county. The last two midwives have been retired because medical and hospital facilities are now adequate. The county now participates in the state program for Hospitalization of the Indigent.

The prospect of a sewage treatment plant for Inverness looks very good at the present. The public, on a referendum, voted in favor of the plant. A federal grant has been obtained and as soon as the final financial arrangements are made, construction should begin."

CLAY: A. Y. Covington, M.D., M.P.H.

"After prolonged study and many conferences, Clay County accepted the offer of the State Board of Health to begin a combination nursing service as one of the demonstration programs scheduled for three selected rural counties in Florida. A Public Health Nursing Advisory Council with county wide representation has been organized and is preparing for incorporation. As soon as an additional qualified public health nurse can be secured, nursing services will be expanded to include bedside care in the home."

COLLIER: Joseph W. Lawrence, M.D.

"Through the cooperation of the State Board of Health, the Bureau of Mental Health, the Collier County Health Department, the Collier County School Board and the Collier County Mental Health Association, we are hiring a Clinical Psychologist, full time, for the Collier County Health Department. With the help of the present mental health worker, we should be able now to give unusual service in the mental health field in this County.

Through the cooperation of the Bureau of Maternal and Child Health we have been able to employ a full time clerk, three nurses, a local physician (on a fee basis) and an interpreter for our Immokalee Office. We are now able to give much better service to this area of Collier County and to its vast migrant population."

DADE: T. E. Cato, M.D., M.P.H.

"The Division of Research and Program Development was instituted within this County Health Department on March 1, 1957. Dr. Michael J. Takos, formerly Director of the Venereal Disease Control Division, was appointed director.

Several projects are well under way. Some of them are as follows: (1) An epidemiologic study of the inmates of Dade County nursing homes; (2) Investigation of the causes underlying syphilis deaths in this community; and (3) Epidemiologic study of coronary heart disease.

In November 1957, the Children's Bureau approved funds for establishing the Dade County Clinic for Mentally Retarded Children. This will be essentially a service program, but we expect to do research studies in the area of mental retardation.

In the course of their regular visits to food warehouses, processing plants, bakeries and other food establishments, sanitarians examine food products for contamination, spoilage and insect infestation. Foods found to be 'unfit for human consumption' are destroyed. Dade County sanitarians condemned 291,028 pounds of various foodstuffs during 1957. More than two-thirds of this total consisted of flour and cereal products. Insect infestation, both larval and adult stages, was the major reason for condemnation.

'Are You Safe In Your Home,' a project jointly sponsored by the County Health Department and Board of Public Instruction reached a climax during the month of December. Every sixth grade child (approximately 15,000) in our public schools received a leaflet having the above title. With the assistance of their parents, the children used the check list in the leaflet to inspect their homes for hazardous conditions."

ESCAMBIA: J. C. McSween, M.D.

"The County Health Department, as part of its educational program, sponsors a weekly television program, 'Your Child', WEAR TV, 10 A.M., Monday, Channel 7. The program is conducted by Dr. Elsie Broussard, who presents various phases of child growth and development. Members of the Parent-Teachers Association, who attend four such sessions, receive study group credit toward certificate of improvement in their Association. Dr. Edward Flemming conducted two workshops, prior to the beginning of the television series, on Child Growth and Development for public health nurses who serve as resource consultants to parent groups, the other on Group Discussion Leadership Techniques for members of the local Parent-Teachers Association.

Miss Floreine Marshall of this department has been coordinator of the Joint Rehabilitation Committee for Mental Health, sponsored by the Escambia County Mental Health Association. Its aims are to coordinate community agency services, both public and private for the

mentally ill in this County. This should result in more comprehensive rehabilitative services than would be possible by individual agencies and avoid duplication of services. Represented on this committee are the Mental Health Association, Health Department, Public Welfare Department, Vocational Rehabilitation, Alcoholic Rehabilitation, State Employment Service and the Veterans Administration."

HIGHLANDS: William F. Hill, Jr., M.D.

"There are several programs of which Highlands County is proud. First is the intensive diphtheria immunization program throughout the county as a result of several cases reported in the early part of this year. Second is a blood typing and serology program among the colored people for the establishment of a blood bank roll which was badly needed, and third is an intensified school health program in the high schools, including professional dental exams."

HILLSBOROUGH: Frank V. Chappell, M.D., M.P.H.

"By recognizing that patients from the State Mental Hospital, on trial visits home, need the coordinated services of many health and welfare agencies, we entered into a cooperative, coordinated planning with the medical profession, the variously concerned courts of law and other health and welfare agencies to meet regularly to discuss the role that each plays with the patient, his family and his rehabilitation needs."

Through consultation service provided by the State Hospital, State Vocational Rehabilitation Service, Florida State University, Florida State Board of Health and U. S. Public Health Service, this plan has evolved into a clearly defined organizational pattern to enter into a demonstration project to be known as the Mental Health Resource Council of Hillsborough County."

INDIAN RIVER: Neill D. Miller, M.D.

"The City of Vero Beach adopted the U. S. Public Health Service Ordinance Regulating Eating and Drinking Establishments, and empowered the County Health Department to inspect and approve septic tank installations before a certificate of occupancy is issued."

Through the combined efforts of our active Mental Health Association and the Board of County Commissioners, an office was added to the health department and the services of a part-time mental health worker obtained. The nursing staff and the mental health worker sponsored a Human Relations Workshop in which teachers, social workers, hospital nurses, public health nurses and nursing home operators participated. Mental Health was also the theme for the year for the nurses monthly in-service study group."

JACKSON:

"A rural indigent heart clinic was initiated May 16, 1957 through the interest of Dr. S. D. Doff, Director of the Heart Disease Control

Program, State Board of Health, Dr. James T. Cook, a private physician of Marianna and Dr. Henry I. Langston, who was at that time Director of Jackson County Health Department. Physicians on the staff of Jackson Hospital are assisting in this program and the Board of County Commissioners has furnished limited funds for the provision of free medications to the clinic patients."

Indigent and medically indigent patients are admitted to services on referrals by private physicians in the county or by the county health officer. Services consist of a careful diagnostic evaluation and development of a treatment regimen which is supervised by the public health nurse under the direction of the physicians in charge of the clinic. This clinic is held every Wednesday morning from 8 to 12 o'clock. Follow-up of the patients is being done by the public health nurses."

LAKE: J. Basil Hall, M.D., M.P.H.

"This County Health Department has received much publicity during the year. A paper published in the March 1957 issue of Medical Economics and given the 1956 National Medical Economics Award, entitled 'We Pack'em In' was written by the director. Doctor Hall also had a paper published in Volume 5, December, 1957 Nursing Outlook, entitled 'The Nurse in Environmental Sanitation'."

LEE: Joseph W. Lawrence, M.D.

"We are expanding our health department to four nurses, a nurse supervisor and three sanitarians. This is improving our services to the community and county."

We have an X-ray unit in the Ft. Myers office and can now X-ray all tuberculosis contacts and health card applicants. This is a big advance in our food sanitation program."

MANATEE: John S. Neill, M.D., M.P.H.

"1957 has been a banner year for the Manatee County Health Department. Of many outstanding programs, two should be enumerated as the most outstanding:

The creation of a License Board for Day Nurseries and Foster Boarding Homes should improve the condition of the children of this county."

We also embarked on a tuberculin testing program of the school personnel followed by a chest X-ray of the positive reactors. This was a gratifying joint effort of the Tuberculosis Association, school authorities, private physicians and the health department."

We hope that this study will result in requiring teachers to have an annual definitive check for tuberculosis."

We are also very proud of the nucleus of the Manatee County Public Health Library which was made possible through a private gift."

The addition of a Mental Health Worker to our staff should contribute a great deal to our public health efforts."

MARION: Frank DiTraglia, M.D.

"The greatest contribution was in the extension of clinic services to the rural area. On December 4, 1957, we opened the first rural clinic in Marion County at Dunnellon, Florida. Plans are in existence to open a rural clinic in the Reddick, Citra and Oklawaha areas."

MARTIN: Neill D. Miller, M.D.

"One of the foremost additions in the field of sanitation has been the influx of large dairies from the Dade and Palm Beach County areas resulting in our county becoming a leading dairy county in South Florida. Careful supervision of barn construction and production of milk has been maintained throughout the expansion.

The City of Stuart has empowered the health department to inspect and approve septic tank installations before a certificate of occupancy is issued."

MONROE: James L. Wardlaw, M.D., M.P.H.

"A Future Nurses Club was organized at the Key West High School by the nursing division, and a course in mother and baby care was taught to the group. It is a very popular activity and now has twenty members.

Additional funds were secured and two additional nurses were added to the staff in addition to the replacement for the senior nurse while she is taking advanced training. An additional sanitation position is authorized but remains unfilled. A mental health worker was also added to the staff.

Although funds were not available as anticipated for the construction of two health centers in the Keys, space was rented in the Marathon Medical Center and a sub-center established there."

NASSAU:

"Plans for a sewer and water system for the City of Callahan moved another step forward when the Nassau County Circuit Court on December 17, validated \$350,000 in revenue bonds for financing the project. The Federal Government has approved a grant of \$38,790 to be used toward construction of a primary treatment plant and pumping station, and the city has accumulated about \$40,000 from a utility tax to apply toward the construction. Barring unforeseen delays the project should be completed during 1958 and will be the culmination of ten years of untiring effort by public spirited citizens of Callahan, the County Health Department, and the Bureau of Sanitary Engineering.

The City of Fernandina Beach this year passed an ordinance outlawing all outdoor privies where water under pressure is available, and by the end of 1958 the outdoor privy in Fernandina Beach should be a thing of the past."

OKEECHOBEE: Neill D. Miller, M.D.

"This small county is rapidly becoming a leading milk producing county because of the influx of large dairy herds from the Dade and Palm Beach County areas. Careful supervision of barn construction and the production of milk has been maintained throughout the year. Milk production has increased 1400 per cent in this county during the past year and we anticipate an even larger growth during the next twelve months."

ORANGE:

"In late August 1957 the roof of the County Court House fell into the Health Department Clinic Room during the noon hour, but no one was injured. As a result the County Health Department has moved twice, causing confusion and inefficiency in every program.

An existing school building was bought and extensively remodeled. Now the health department has comfortable, modern quarters, with room for considerable expansion.

The County Commissioners increased the health department appropriation by one-tenth of a mill, thus allowing the employment of more personnel, with corresponding improvement in service."

PALM BEACH: C. L. Brumback, M.D., M.P.H.

"The Migrant Project got under way when the team was completed. This team is composed of two public health nurses, a health educator, a medical social worker, a nutritionist, a liaison worker and a secretary. Dr. Earl Koos is the chief consultant, and together with Dr. R. W. McComas, and local participants developed the plan which is now being carried out with frequent additions and revisions. The project is financed by the U.S. Children's Bureau, and representatives of that agency, as well as the U.S. Public Health Service have taken an active interest.

A special act passed the legislature providing for a countywide milk ordinance based on the ordinance already in effect in West Palm Beach. Another countywide ordinance was passed regulating frozen desserts, including ice cream and related products.

Considerable work was done with other county representatives in connection with the establishment of county zoning in May 1957. Through these cooperative efforts a requirement was established through which approval of a building site with regard to sewage disposal must be obtained from the county health department prior to issuing a building permit.

The City of West Palm Beach completed its sewage treatment plant and the town of Palm Beach completed its collection system and ocean outfall. Voters in Belle Glade approved a sewage treatment program which will overcome a major septic tank problem in that city. Three large subdivisions completed the first phase of their sewage disposal systems. Preliminary plans for sewage disposal systems have been submitted by Riviera Beach and Lake Worth. These programs have resulted from a great deal of educational work done during recent years."

PINELLAS: William C. Ballard, M.D., M.P.H.

"Our plans this year, other than the promotion of the basic program, including specific studies to determine if our county is meeting its needs in mental health, tuberculosis, gerontology and public health nursing. Many meetings, conferences, and studies were conducted. These will continue in 1958.

We were fortunate in obtaining nine new employees. This includes a dentist and a dental assistant and climaxes a long term promotion for a second dentist.

The Visting Nurse Association extended its coverage to the Seminole area in Pinellas County, leaving only Tarpon Springs without bedside nursing care.

Plans were completed for the construction of a new, modern health center in Tarpon Springs.

Eleven different communities in the county began, or completed, new sewerage systems, or additions to existing ones. A new sanitary landfill to serve the lower section of the county was inaugurated.

Through cooperation with PTA, church and other groups, adequate control of home cooked goods and public suppers has been established."

POLK: C. L. Nayfield, M.D., M.P.H.

"The County Health Department organized a new district in the Auburndale-Polk City area. The City of Auburndale purchased a building which the Polk County Commissioners are remodeling as a new district office for the area. The staff for this office will consist of one sanitarian, two public health nurses and a clerk-typist.

Another new district was created when the Mulberry office was opened July 1. This office staff consists of two public health nurses, one sanitarian and a clerk-typist.

In the present budget the Polk County Commissioners included funds for the construction of two new district offices. These will be located in Haines City and Lake Wales. The contracts for these buildings should be awarded in the near future as the necessary Hill-Burton funds have also been approved."

PUTNAM: N. B. Edgerton, M.D., M.P.H.

"No milk or milk products shall be sold to the final consumer except pasteurized milk properly labeled" — thus reads the new milk ordinance for the City of Palatka. Putnam County Health Department had been striving for ten years to get such an ordinance passed."

ST. LUCIE: Neill D. Miller, M.D.

"A local bill was passed by the State Legislature to govern building and zoning. Under this act the health department has been designated as the authority to inspect and approve septic tank installations in the county. Similarly the City of Fort Pierce has empowered the health department to inspect and approve septic tank installations in the city before a certificate of occupancy is issued.

Following the adoption last year of the U. S. Public Health Service Ordinance Regulating Eating and Drinking Establishments, the health department has maintained an extensive restaurant permitting program in the City of Fort Pierce resulting in highly improved restaurant sanitation.

A highly successful Salk vaccine program was carried on throughout the schools of the county as well as in the health department.

Late in the year a tuberculosis clinic was started in the health department staffed by a local pediatrician. The clinic is conducted for the purpose of case finding, diagnosis, and treatment of infants and children."

SARASOTA: William L. Wright, M.D., M.P.H.

"The county now has countywide electrical, building, and plumbing inspections. The Southern Building Code has been adopted with some amendments. No permit may be issued for any building requiring sanitary facilities unless such facilities have first been approved by the County Health Department. In two areas where approval was withheld the people have held referendums and taxed themselves to provide adequate drainage.

A local bill was passed by the Legislature requiring all water and sewage systems serving more than one hundred to obtain a franchise from the County Commission.

The county subdivision regulations now require a letter of approval with recommendations regarding fill and drainage from the county health departments."

UNION: A. Y. COVINGTON, M.D., M.P.H.

"Outstanding was the completion and opening of a new modern, consolidated elementary school for the Negro children. All children in the county were transported to this one school and for the first time in

their lives the Negro children had the advantage of electricity, lighting, ventilation, and approved water supply and sewage.

Through cooperative efforts of official agencies and private individuals, the mental and physical health of Union County was given a boost by development of a public beach in Lake Butler. The area surrounding a portion of the Lake was cleaned, extensive docks were built with recreational equipment, and a picnic area was developed with approved water and sewage.

The medical care program was greatly improved by the county participation in the State Indigent Hospitalization Program and expansion of the hospital facilities in Lake Butler."

VOLUSIA: D. V. Galloway, M.D., M.P.H.

"A full time dentist was employed to work with problems among the school children on dental hygiene. This program began only in October, so we are not ready to report on it.

We have selected the Health Department Health Survey made by the State Board of Health as one of the outstanding events of 1957. It seemed to bring the activities of the health department closer together and to help us find the most important objectives in this county."

WALTON: R. N. Nelson, M.D.

"A sewage treatment plant has been installed in DeFuniak Springs and such installation is ample to care for approximately 20,000 people. DeFuniak Springs' population at this time is between 5,000 and 6,000.

A new 12-inch well, 868 feet deep, 12 inches in diameter with a capacity of 650 gallons of water per minute has been added to our city water supply which increases the supply and pressure to meet the needs of the city.

An additional extension to our water system is now serving nineteen new families and one dairy."

WASHINGTON: R. N. Nelson, M.D.

"As we, the personnel of the County Health Department review the accomplishments of the past year, 1957, and look forward to 1958, we have renewed hope of greater possibilities for the future. Our new sixty thousand dollar health department building should be ready for occupancy by March 1, 1958. The modern building and the modern equipment, we feel sure, will inspire all of us to do a better job in the future than we have in the past."

DIVISION OF PUBLIC HEALTH NURSING

RUTH E. METTINGER, R.N.,
Director

This division has coordinated the nursing service with all bureaus and divisions for the purpose of assisting the county units in improving the overall public health nursing program.

INSERVICE EDUCATION:

A. Considerable time has been spent on the inservice study groups with emphasis on the mental health program as it is integrated in all phases of public health nursing.

B. The 48-hour visits to the state mental hospitals continue to be most helpful; especially, in the follow-up of patients released on "trial visit." Fifty-nine public health nurses and five health officers made the visit to the hospital in Chattahoochee. It was necessary to discontinue the program in June due to a change in hospital personnel; however, plans were made in December to resume the visits in January 1958.

A similar program was initiated in August at the hospital in Hollywood. Patients are admitted to this institution from eight counties only. Approximately 30 public health nurses and five health officers visited the hospital during the two orientation periods, August and September.

C. Orientation of public health nurses in the state tuberculosis hospitals has changed somewhat. Most of the nurses have made the 48-hour visit. Groups are now returning to the hospital for a one-day orientation program to observe newer treatment methods and visit patients from their county. The hospital nursing personnel continues to visit the health departments for a two-day orientation.

D. A follow-up workshop on leadership, planned jointly by this division and the Bureau of Mental Health, was conducted at the University of Florida. The same nurses and, insofar as possible, the same faculty, who attended the original workshop in 1956, participated.

A five-day intensive workshop on better nurse-patient relationship was held in Gainesville at the training center. In addition to resource people invited from the University of Florida faculty, the U. S. Public Health Service Regional Office, and the Bureau of Mental Health, we were fortunate in securing the services of Miss Ruth Von Bergon from the School of Public Health, University of Minnesota. Each participant brought with her a record — verbatim interviews with a patient — which was used as a basis for detailed discussions regarding the reactions of both the nurse and patient in their contacts.

E. Personnel from this division attended a series of institutes sponsored by the Crippled Children's Commission. Two days were devoted to theory, review and demonstrations. Six weeks later, there was a two-day follow-up session, which included group discussion and reports on use of information from first session.

F. The third series of biennial heart disease institutes was held in six areas. A new approach was initiated; instead of formal lectures, a case study was used. The patient and his physician were present; the case history was used as the basis for discussion by the physician. A panel consisting of all branches of nursing, a nutritionist, social worker, and rehabilitation worker discussed informally the contribution each could make in the care of a cardiac patient.

G. A major change in the inservice training program in Gainesville for nurses is the emphasis on intensive work with a small number of families. The program is primarily for nurses without formal preparation and with little or no experience in public health nursing; however, nurses with years of experience have requested permission to take advantage of the two-month's intensive preparation. Ten nurses were oriented in 1957.

ADVANCED EDUCATION:

A. Five nurses were given scholarships for the year's program of study in public health nursing by the State Board of Health (1957-58). Three nurses received Title I and II Traineeships from the U. S. Public Health Service.

The state midwife teacher received a Title II Traineeship from the Children's Bureau to obtain her Master's degree in Maternal and Child Health.

B. Several nurses, financed by voluntary agencies: Tuberculosis Association, Heart Association and Cancer Society attended the six weeks' summer course at the University of North Carolina.

C. The Division of Heart Disease Control gave three scholarships to public health nurses for the three-weeks' course in rehabilitation at Rusk Institute.

COMMUNITY NURSING SERVICE:

Discussion at the annual supervisors' conference centered around community nursing services and clinical field experience for students. Miss Abbie Watson, Director, Richmond, Virginia, Combination Service, pointed out the advantages of the nursing service in a community being rendered by only one agency.

Tentative plans have been made and approved for demonstrating the advantages of the official agency rendering a complete nursing service. Three rural and semi-rural counties have been selected for this

demonstration project. In one county a citizen's advisory committee to the health unit has been organized, and will be responsible for fees collected for the home nursing services. The Sarasota County Visiting Nurse Association, which was coordinated with the health department, has combined, thus reducing the size of each nurse's district and eliminating any overlapping of travel and visits. There is a total of three combination services, a trend which is spreading throughout Florida.

FIELD EXPERIENCE:

A. Field experience has been provided for students attending the four university schools of nursing in Florida; also, graduate student nurses from the University of North Carolina, Peabody College and Vanderbilt University.

B. At the request of the U. S. Public Health Service, students from the Philippines and Costa Rica were assigned to county units for both staff and supervisory experience.

RESEARCH:

In two of the key counties a research project in nursing was begun; the entire staff of both counties participated in collecting data for the time study, which should give some indication of community needs, strengths and weaknesses in the total nursing program and assist in determining how to meet those needs. Expert consultation is being given by Dr. Marion Ferguson, Regional Consultant, U. S. Public Health Service.

CONSULTANT FIELD SERVICE:

A. Each consultant participates in the nursing home program. One consultant devoted additional time toward planning and conducting an educational program for the operators and supervising staffs of nursing homes; and has appeared before various groups to acquaint them with the needs of the nursing homes.

B. Special attention was given to counties by consultants where nurses were unable to attend the inservice training center and had no previous experience or formal education in public health. Emphasis was placed on planning and implementing the generalized public health nursing program. Many visits were for basic orientation and supervision.

C. The counties have profited by securing the services of better prepared nurses, graduating from the university schools of nursing, which include the approved course in public health nursing. According to the count requested by the U. S. Public Health Service biennially, thirty-one per cent of the 510 nurses employed have had the approved course in public health; 32 graduates from the university schools of nursing are now employed.

MIDWIFERY PROGRAM:

The state midwife consultant was a participant at the Seventh American Congress on Maternal and Child Welfare in Chicago; she discussed the supervision and organization of the untrained midwives in Florida.

The number of licensed midwives has been reduced by 16 in 1957. In 1956, a total of 299 were licensed and in 1957 a total of only 283 requested renewals through the county health units. More adequate hospital facilities and low-cost hospital planning make it possible for the low income patients to be delivered in hospitals. Twenty-six counties were visited to follow-through on the midwife program and sixteen revisits to several of the counties were made on behalf of projects initiated by local personnel in midwife supervision.

TABLE 5
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	114	245	4	177	83	1,408	1	87	228	257	24	0	206	180	98	63	81
2. Field and Office Visits	144	311	8	275	104	1,826	2	99	228	366	25	0	999	410	315	105	154
3. Hookworm Treatment Given	154	317	338	117	21	232	223	50	228	42	45	867	24	191	90	134	229
TYPE OF IMMUNIZATION																	
4. Smallpox	1,121	62	964	269	276	1,117	145	122	100	228	262	507	16,683	336	57	1,400	4,086
5. Diphtheria	2,154	179	1,805	666	608	1,469	285	161	214	355	373	2,370	10,254	310	254	3,991	4,593
6. Whooping Cough	1,440	179	1,805	541	472	1,319	269	111	159	267	198	2,370	10,251	193	233	2,905	3,895
7. Tetanus	2,630	179	3,321	883	620	2,015	357	220	660	471	381	3,277	10,518	517	465	4,760	6,044
8. Poliomyelitis	11,004	1,253	10,510	2,985	7,160	11,561	1,022	963	1,399	3,353	981	5,440	70,014	2,126	878	9,006	26,105
9. Typhoid	1,436	167	6,080	148	531	323	201	4	280	5	74	2,762	418	19	631	211	6,240
10. Rabies-Humans	19	0	0	12	0	0	0	0	0	0	0	0	0	0	0	2	0
11. Rabies-Animals	1,796	0	0	42	0	0	0	0	0	343	0	0	0	0	0	0	0
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	1,427	11	203	41	78	359	5	8	2	56	36	178	6,951	11	9	16,832	2,298
2. Not Infected	124	4	96	10	16	40	0	0	0	16	5	5	4,668	3	0	14,496	909
3. Treated in Clinic	801	5	102	26	50	254	4	0	0	20	12	173	1,663	5	9	14,426	1,429
4. Treated by Priv. Physician	1	1	0	2	4	25	0	3	0	4	3	2	143	0	0	26	4
5. Ret. to Treatment in this Clinic	312	0	0	2	3	28	0	0	0	0	0	0	0	0	0	142	54
6. Ret. to Treatment to Priv. Physician	0	2	0	2	5	23	0	0	0	0	0	0	0	1	0	0	0
7. Epidemiologic Treatment	427	0	9	2	12	36	0	0	0	8	8	0	632	1	0	682	829
8. Patients Interviewed	498	5	48	26	21	255	0	0	2	18	19	32	1,268	6	1	1,249	625
9. Contacts Obtained	588	3	78	15	20	164	1	1	1	9	14	2	1,714	1	5	1,695	955
10. ER's Closed	658	4	144	6	30	193	0	0	0	34	14	9	2,628	5	10	2,520	1,128
11. Field and Office Visits	2,323	18	363	68	116	1,232	25	8	3	150	61	240	15,880	34	40	26,327	2,562
C. TUBERCULOSIS CONTROL																	
1. Admission to Service-Case Active	47	2	22	20	27	103	2	6	7	13	13	17	599	5	1	77	163
2. Adm. to Service-Case Inactive	158	3	104	11	38	276	4	11	11	14	12	23	905	11	15	228	341
3. Adm. to Service-Contacts & Suspects	281	13	149	107	76	446	47	33	11	58	58	38	4,348	11	20	171	833

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	16	22	269	7	41	353	0	310	2	132	78	558	36	17	39	76	26
2. Field and Office Visits	25	22	269	7	41	508	0	312	2	179	80	608	40	26	51	80	26
3. Hookworm Treatment Given	19	244	111	122	40	591	1,129	268	15	225	40	294	408	8	226	29	103
TYPE OF IMMUNIZATION																	
4. Smallpox	75	212	443	18	10	285	16	150	30	117	84	4,552	386	311	877	275	81
5. Diphtheria	246	198	1,101	147	43	416	187	423	144	164	87	6,432	684	555	1,670	549	141
6. Whooping Cough	148	193	1,520	106	40	413	187	351	107	130	237	4,118	538	332	1,034	336	125
7. Tetanus	286	458	1,679	189	60	718	224	455	155	219	379	7,713	808	670	3,050	715	215
8. Poliomyelitis	560	728	6,271	1,094	401	2,157	2,725	3,401	1,039	2,154	3,418	43,156	1,834	2,304	7,027	2,663	798
9. Typhoid	7	257	1,085	31	7	886	50	31	9	0	76	340	122	228	3,133	872	155
10. Rabies-Humans	7	0	0	0	0	0	0	0	0	0	13	3	0	0	0	3	0
11. Rabies-Animals	31	0	1,000	0	110	0	0	0	75	0	930	0	0	0	881	12	0
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	23	20	176	0	3	38	25	9	7	9	17	2,365	18	37	84	83	2
2. Not Infected	0	5	5	0	0	4	0	2	0	2	9	1,158	2	3	8	6	1
3. Treated by Priv. Physician	19	15	98	0	2	34	20	5	5	3	48	1,145	12	30	74	33	3
4. Ret. to Treatment in this Clinic	2	0	6	0	1	0	5	1	1	0	8	12	0	1	0	8	0
5. Ret. to Treatment to Priv. Physician	0	0	0	0	0	0	0	1	0	0	3	1	0	0	0	0	0
6. Epidemiologic Treatment	2	0	77	0	0	0	0	1	0	0	8	194	0	13	8	14	0
7. Contact of	6	10	48	0	0	6	0	6	1	2	42	1,220	9	25	56	52	0
8. Patients Interviewed	12	6	75	0	0	13	0	1	4	1	41	1,439	12	16	21	18	0
9. Contacts Obtained	2	2	155	0	0	38	0	4	1	13	44	1,660	2	16	11	67	3
10. ERF's Closed	45	28	661	0	7	104	40	33	15	13	95	11,251	33	75	169	112	20
11. Field and Office Visits																	
C. TUBERCULOSIS CONTROL																	
1. Admission to Service-Case Active	1	11	16	0	0	14	15	2	6	6	12	343	2	3	27	1	4
2. Adm. to Service-Case Inactive	8	7	51	4	4	6	9	13	3	1	30	642	7	31	82	9	1
3. Adm. to Service-Contacts & Suspects	26	27	215	3	10	68	20	31	14	35	152	3,332	85	22	87	12	20

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okechobee	Orange	Osceola	Palm Beach	Pasco
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	167	74	129	38	13	334	867	758	152	166	207	108	10	401	5	186	569
2. Field and Office Visits	329	102	142	38	13	350	1,000	887	156	210	283	108	12	456	15	383	598
3. Hookworm Treatment Given	43	94	110	144	196	140	1,88	268	7	3	169	141	14	391	98	31	299
TYPE OF IMMUNIZATION																	
4. Smallpox	79	932	1,269	254	40	492	528	924	615	1,062	1,153	1,055	13	3,411	197	4,227	166
5. Diphtheria	232	858	745	475	211	1,060	855	353	621	1,125	1,639	2,313	49	4,796	680	8,432	401
6. Whooping Cough	194	405	733	307	142	1,875	620	383	323	475	1,368	1,651	31	3,424	551	3,158	336
7. Tetanus	246	1,038	1,706	858	331	1,532	1,072	493	692	1,976	1,534	3,251	49	6,535	702	11,714	453
8. Poliomyelitis	7,004	1,360	7,376	1,438	728	3,234	4,064	10,623	1,723	2,902	3,474	6,706	995	13,434	2,466	22,442	4,331
9. Typhoid	81	214	1,574	1,766	225	2,627	137	1,315	241	1,411	3,478	2,453	22	5,121	152	2,540	0
10. Rabies-Humans	0	0	51	0	26	499	2,385	0	0	0	361	0	0	0	0	0	0
11. Rabies-Animals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	31	96	1,573	30	5	27	328	760	63	134	10	143	16	708	58	475	52
2. Not Infected	2	7	178	8	0	1,060	0	154	2	38	0	0	2	212	1	11	32
3. Treated by Priv. Physician	6	70	974	4	5	19	130	415	23	84	9	150	11	469	53	409	15
4. Ret. to Treatment in this Clinic	8	54	1	1	0	0	2	12	8	3	4	36	1	19	5	9	0
5. Ret. to Treatment to Priv. Physician	1	0	48	0	0	0	20	2	1	1	0	0	0	4	0	5	0
6. Epidemiologic Treatment	7	0	372	10	0	9	46	79	4	53	0	0	6	22	17	88	2
7. Contact of	4	28	420	1	0	27	77	509	21	61	13	89	8	44	38	202	18
8. Patients Interviewed	7	33	739	1	0	21	87	312	17	33	13	63	9	39	41	266	15
9. Contacts Obtained	24	41	817	18	0	11	208	468	24	60	9	9	11	244	19	485	22
10. ERF's Closed	88	167	4,533	48	8	36	463	1,551	132	449	92	183	65	1,607	137	1,606	107
11. Field and Office Visits																	
C. TUBERCULOSIS CONTROL																	
1. Admission to Service-Case Active	33	37	48	3	3	19	50	26	10	16	12	13	2	167	14	193	30
2. Adm. to Service-Case Inactive	76	70	99	22	3	6	62	60	26	49	27	66	9	270	15	366	23
3. Adm. to Service-Contacts & Suspects	137	272	218	66	11	102	106	121	35	73	132	66	60	524	38	522	190

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
A. COMMUNICABLE DISEASE CONTROL																
1. Admissions to Service.....	256	340	136	7	42	43	57	752	241	204	64	200	28	197	1	11,991
2. Field and Office Visits.....	380	487	137	18	66	60	117	732	244	226	92	394	29	210	1	15,942
3. Hookworm Treatment Given.....	64	1,168	30	10	171	31	88	73	379	208	56	124	31	285	717	12,845
TYPE OF IMMUNIZATION																
4. Smallpox.....	991	3,342	801	13	379	417	82	442	74	173	86	550	109	443	161	60,137
5. Diphtheria.....	1,832	6,278	1,233	84	1,195	613	350	774	376	504	486	639	269	802	532	84,910
6. Whooping Cough.....	1,711	5,368	821	83	938	519	337	487	261	367	209	507	236	733	391	63,706
7. Tetanus.....	1,931	6,923	1,572	109	1,722	707	375	776	469	798	502	796	499	1,019	966	109,397
8. Poliomyelitis.....	34,051	32,533	2,520	5,276	3,794	484	4,650	2,063	3,877	2,006	949	8,350	900	3,435	2,320	451,440
9. Typhoid.....	292	274	133	34	2,197	53	36	157	507	1,881	64	286	625	87	231	56,040
10. Rabies-Humans.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
11. Rabies-Animals.....	0	0	0	0	0	0	0	0	0	493	0	0	0	0	0	8,984
B. VENEREAL DISEASE CONTROL																
1. Admissions to Service.....	858	500	240	35	52	220	134	55	122	42	4	105	29	60	26	38,412
2. Not Infected.....	174	30	26	0	19	111	21	9	8	36	0	14	2	75	0	22,886
3. Treated in Clinic.....	320	334	114	34	26	103	93	41	115	0	3	63	11	29	26	22,739
4. Treated by Priv. Physician.....	96	20	0	0	1	2	4	1	0	0	0	9	0	0	1	358
5. Ret. to Treatment in this Clinic.....	5	29	106	1	1	8	4	4	0	0	0	3	1	0	4	1,064
6. Ret. to Treatment to Priv. Physician.....	0	3	3	0	0	0	1	0	0	0	0	2	0	0	0	63
7. Epidemiologic Treatment.....	66	122	10	0	1	3	16	0	0	13	0	16	14	10	4	3,966
8. Patients Interviewed.....	91	177	24	26	41	98	49	46	8	34	0	103	5	23	23	7,901
9. Contacts Obtained.....	114	167	25	10	8	95	62	32	17	27	0	132	5	24	13	9,269
10. ERF's Closed.....	379	269	270	0	0	44	110	24	16	9	0	111	16	40	5	13,156
11. Field and Office Visits.....	3,145	1,030	333	118	84	338	470	92	229	99	19	478	36	126	35	80,055
C. TUBERCULOSIS CONTROL																
1. Admissions to Service-Case Active.....	116	76	12	16	25	27	28	5	19	18	1	74	3	7	4	2,694
2. Adm. to Service-Case Inactive.....	395	216	15	38	14	72	21	9	16	19	7	199	4	23	2	5,313
3. Adm. to Service-Contacts & Suspects.....	630	465	32	78	112	142	130	45	35	57	7	343	32	81	0	15,721

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
C. TUBERCULOSIS CONTROL (Cont.)																	
4. No. of Persons X-rayed- Miniature Films.....	5,477	12,15,918	0	0	0	60,159	1,619	0	0	1	3,626	17,24,235	3,625	0	0	0	0
5. No. of Persons X-rayed Large Films.....	799	16	865	276	1,618	1,272	81	40	30	81	50	64	6,793	47	21	2,415	1,376
6. Tuberculin Test.....	169	1,497	146	146	2,259	2,209	4	115	5	7	38	28	1,442	3	46	627	1,773
7. Field Visits.....	522	17	115	380	255	2,312	125	172	44	125	74	189	4,017	72	68	1,273	2,551
8. Office Visits.....	54	28	309	72	222	1,438	12	46	46	82	124	48	16,541	23	1	2,597	62
9. Cases Hospitalized.....	17	1	16	9	11	83	3	2	5	5	5	8	702	3	1	23	0
D. MATERNITY SERVICE																	
1-2. Patients Admitted to Maternity Medical Service.....	438	28	141	83	199	339	9	0	3	82	52	8	3,447	0	59	53	532
3. Visits by Antepartum Cases to Medical Conferences.....	917	41	363	181	474	826	12	0	4	208	104	8	12,074	0	156	131	785
4. Patients Admitted to Maternity Nursing Service.....	594	87	150	121	287	405	20	3	26	85	81	209	4,084	0	55	318	539
5. Field Nursing Visits.....	1,330	122	183	415	470	424	15	3	42	304	39	369	10,164	0	63	511	1,434
6. Office Nursing Visits.....	1,858	45	432	102	686	1,762	25	1	4	211	283	309	11,269	0	189	259	1,445
7. Patients given Postpartum Medical Examinations.....	203	5	28	0	52	128	1	0	0	7	3	8	955	0	17	13	289
8. Number of Midwife Meetings.....	13	3	8	21	80	83	2	0	0	11	1	11	140	0	5	2	46
9. Visits for Midwife Supervision.....	20	9	8	0	0	0	9	0	0	11	8	61	0	0	60	0	0
10. No. of Midwife Deliveries Supervised by health dept. personnel.....	15	0	0	0	0	30	0	0	0	1	0	0	0	0	1	0	0
11. No. of Individuals Enrolled in Classes for Expectant Mothers.....	108	0	0	0	0	0	0	0	0	0	0	0	465	0	0	0	7
E. CHILD HEALTH SERVICES																	
2-3. Adm. to Well Child Medical Service-Infants.....	609	53	58	75	59	549	11	4	2	93	10	25	3,698	0	39	335	300
1-b. Adm. to Well Child Medical Service — 1-4.....	100	248	13	62	4	42	25	0	9	58	3	24	1,776	0	34	135	4
1-c. Adm. to Well Child Medical Service — 5 over.....	97	384	6	42	2	4	28	0	2	75	2	17	793	0	47	109	0
4. Visits to Well Child Medical Conference: 1-4.....	643	87	131	131	75	1,089	11	4	2	112	11	27	9,020	0	51	715	926
5 - over.....	132	599	6	70	2	5	28	0	2	93	2	18	2,414	0	68	132	0

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
C. TUBERCULOSIS CONTROL (Cont.)																	
1. No. of Persons X-rayed- Miniature Films	0	0	0	0	553	0	0	2,156	1,670	0	3,886	77,508	1	0	0	0	0
2. No. of Persons X-rayed- Large Films	63	127	114	13	20	131	32	45	55	68	142	1,224	135	146	236	40	13
3. Tuberculin Test	18	15	73	5	0	68	25	69	2	47	23	725	84	8	95	13	12
4. Field Visits	43	23	444	17	16	187	62	95	9	71	225	3,640	126	182	210	46	19
5. Office Visits	69	74	178	3	14	164	71	51	35	88	143	3,606	104	50	107	23	28
6. Cases Hospitalized	1	4	14	1	2	20	5	5	2	3	13	66	5	4	13	2	3
D. MATERNITY SERVICE 1-2. Patients Admitted to Maternity Medical Service	75	13	423	6	19	16	27	42	48	12	16	1,650	11	0	151	41	15
3. Visits by Antepartum Cases to Medical Conferences	184	16	892	11	33	16	40	131	100	20	29	6,026	11	0	181	99	29
4. Patients Admitted to Maternity Nursing Service	101	19	600	45	7	18	73	60	0	18	2	2,131	25	116	471	62	28
5. Field Nursing Visits	143	6	782	157	1	44	172	62	0	36	3	7,782	23	253	1,151	98	29
6. Office Nursing Visits	239	26	1,030	13	9	31	193	168	0	20	1	7,772	48	98	950	137	46
7. Patients given Postpartum Medical Examinations	19	2	98	1	0	4	19	12	1	4	1	663	4	0	38	12	0
8. Number of Midwife Meetings	4	0	9	1	0	0	7	2	0	0	0	0	1	0	11	2	0
9. Visits for Midwife Supervision	3	8	125	0	0	6	25	4	0	6	4	21	15	29	124	1	9
10. No. of Midwife Deliveries Supervised by health dept. personnel	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11. No. of Individuals Enrolled in Classes for Expectant Mothers	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
E. CHILD HEALTH SERVICES 2-3. Adm. to Well Child Medical Service-Infants	95	0	142	0	4	1	1	14	6	5	5	2,403	34	2	59	46	9
1-b. Adm. to Well Child Medical Service - 1-4	27	1	71	0	1	3	3	1	3	0	2	4,721	81	0	27	5	6
1-c. Adm. to Well Child Medical Service - 5 over	0	2	226	0	1	6	0	76	3	0	0	8,779	19	0	5	2	3
4. Visits to Well Child Medical Conference	110	0	204	0	5	1	1	14	6	6	7	5,692	53	2	52	72	11

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
C. TUBERCULOSIS CONTROL (Cont.)																	
1. No. of Persons X-rayed- Miniature Films	17,491	12,566	22,145	5	0	0	1,119	0	0	6,018	0	0	0	0	0	0	0
2. No. of Persons X-rayed- Large Films	308	994	739	88	9	99	660	809	107	403	180	1,308	56	811	181	1,892	116
3. Tuberculin Test	38	649	148	30	4	73	711	53	36	107	1	88	45	1,359	51	5,670	45
4. Field Visits	596	233	522	167	21	171	375	502	146	241	500	235	78	1,099	171	1,775	362
5. Office Visits	123	1,050	329	56	1	129	206	55	32	183	119	70	77	1,302	98	1,053	263
6. Cases Hospitalized	19	18	39	2	1	14	15	24	8	4	15	12	1	78	7	115	14
D. MATERNITY SERVICE 1-2. Patients Admitted to Maternity Medical Service	114	71	129	79	14	59	170	0	0	36	11	12	0	671	76	427	4
3. Visits by Antepartum Cases to Medical Conferences	218	123	398	156	25	124	529	0	0	92	16	14	0	1,317	200	1,002	4
4. Patients Admitted to Maternity Nursing Service	248	264	318	87	7	156	176	72	16	100	108	69	0	206	98	394	34
5. Field Nursing Visits	321	302	686	56	21	393	223	205	37	174	205	114	0	433	217	1,417	24
6. Office Nursing Visits	251	405	15	125	36	138	513	3	1	157	99	97	0	310	378	560	70
7. Patients given Postpartum Medical Examinations	37	21	22	0	0	15	66	0	0	13	1	17	0	129	27	111	1
8. Number of Midwife Meetings	21	1	10	0	0	5	5	2	3	6	13	5	0	4	0	31	2
9. Visits for Midwife Supervision	0	0	31	11	0	15	5	30	11	6	63	5	0	5	15	19	0
10. No. of Midwife Deliveries Supervised by health dept. personnel	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0
11. No. of Individuals Enrolled in Classes for Expectant Mothers	0	2	0	0	0	0	106	0	0	0	2	3	0	1	0	0	0
E. CHILD HEALTH SERVICES 2-3. Adm. to Well Child Medical Service-Infants	33	22	119	10	31	14	50	64	0	24	92	16	0	346	45	212	0
1-b. Adm. to Well Child Medical Service - 1-4	3	1	52	1	14	3	4	69	1	19	320	1	0	77	2	41	0
1-c. Adm. to Well Child Medical Service - 5 over	1	49	4	4	8	10	6	51	94	3	400	4	0	110	0	48	0
4. Visits to Well Child Medical Conference	42	70	124	11	31	21	58	76	0	27	212	16	0	389	51	416	0
1-4	3	1	60	1	16	1	3	4	69	1	775	1	0	346	8	44	0
5 - over	1	52	5	6	10	11	7	53	94	4	1,388	14	0	264	0	69	0

TABLE 5 (continued)

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
C. TUBERCULOSIS CONTROL (Cont.)																
4. No. of Persons X-rayed-	21,292	15,612	0	0	3,516	0	9,150	2,379	67	0	8	0	0	2,908	0	408,901
5. Miniature Films	3,163	1,521	1,030	90	79	624	315	47	67	57	25	5,821	21	131	59	40,248
6. Large Films	207	640	121	33	86	103	21	27	46	37	11	1,341	23	44	12	21,438
7. Tuberculin Test	1,070	1,970	136	354	399	613	448	37	88	155	30	1,628	27	141	15	32,949
8. Office Visits	4,409	800	28	138	127	83	196	94	143	115	29	760	28	268	16	39,467
9. Cases Hospitalized	71	63	15	14	8	16	14	3	11	5	1	34	3	3	2	1,768
D. MATERNITY SERVICE																
1-2. Patients Admitted to Maternity Medical Service	525	838	109	184	0	76	81	1	33	53	57	98	57	66	40	12,129
3. Visits by Antepartum Cases to Medical Conferences	1,716	2,216	232	708	0	255	243	1	46	112	148	521	178	152	50	34,898
4. Patients Admitted to Maternity Nursing Service	561	916	184	236	2	72	410	117	50	77	59	220	59	67	93	16,316
5. Field Nursing Visits	807	2,306	213	372	4	346	1,162	142	51	112	86	645	133	77	108	34,022
6. Office Nursing Visits	2,030	3,585	383	889	3	237	238	83	89	170	147	618	45	241	170	41,747
7. Patients given Postpartum Medical Examinations	138	285	26	0	0	28	20	0	7	10	6	57	13	22	25	3,704
8. Number of Midwife Meetings	0	4	9	1	0	0	1	1	0	3	0	11	1	5	6	230
9. Visits for Midwife Supervision	36	23	3	0	0	0	107	42	5	7	1	39	22	19	11	1,496
10. No. of Midwife Deliveries Supervised by health dept. personnel	0	3	0	0	0	0	0	0	0	1	0	1	0	0	1	60
11. No. of Individuals Enrolled in Classes for Expectant Mothers	0	0	0	0	0	118	0	0	0	0	0	0	0	0	0	813
E. CHILD HEALTH SERVICES																
2-3. Adm. to Well Child Medical Service-Infants	684	874	43	59	60	51	0	3	11	27	41	218	19	59	45	12,018
1-b. Adm. to Well Child Medical Service — 1-4	1,047	100	39	0	0	53	0	0	6	3	52	405	4	46	37	9,889
1-c. Adm. to Well Child Medical Service — 5 over	714	20	3	0	20	49	0	0	5	8	34	526	1	71	89	13,062
4. Children Enrolled in Visits to Well Child Medical Conferences	1,293	1,212	49	126	60	187	0	3	11	35	89	533	22	89	42	24,573

TABLE 5 (continued)

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

[illegible]

TABLE 5 (continued)

SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Millsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
E. CHILD HEALTH SERVICES																	
(Cont.)																	
6. Admissions to Nursing Service																	
Infants	105	13	562	62	27	20	35	48	0	25	10	3,287	19	114	337	155	55
1-4	116	12	863	122	17	17	9	41	2	57	8	5,777	22	89	249	115	137
5-over	107	49	323	174	63	115	47	362	99	36	55	20,381	71	175	293	210	173
7. Field Nursing Visits—Infants.....	127	20	796	174	7	22	89	58	0	107	12	2,882	23	254	734	287	182
1-4	71	14	449	438	6	41	51	48	2	36	11	2,420	31	143	477	139	170
5-over	122	77	449	69	32	172	72	111	12	140	63	4,552	61	179	333	223	124
8. Office Nursing Visits—Infants.....	103	6	339	9	50	23	44	18	0	8	3	6,198	4	100	97	194	30
1-4	147	7	812	25	64	8	15	9	8	27	3	10,553	14	45	29	132	34
5-over	153	35	534	2	34	436	99	276	98	1	21	37,176	93	74	169	13	143
9. Nurse-Teacher Conference																	
5-over	38	25	918	2	60	479	201	320	39	37	72	7,347	166	4	201	4	51
F. SCHOOL HEALTH																	
1. Pupils Examined by physician																	
with parent present	108	8	696	51	48	132	191	117	176	292	258	1,637	334	216	42	175	26
(b) Referred for Further Diagnosis.....	84	2	52	1	1	14	6	15	6	11	53	508	7	0	6	3	0
(c) Completed Referrals	5	2	6	1	0	13	0	14	1	0	61	214	2	0	3	0	0
2. Pupils examined by physician																	
with parent not present	77	24	301	192	95	154	328	154	239	677	489	4,743	403	96	93	52	168
(b) Referred for Further Diagnosis.....	45	0	16	1	2	12	1	7	1	41	44	1,567	3	0	25	12	0
(c) Completed Referrals	1	0	3	1	0	12	0	4	0	33	1	328	0	0	0	2	0
3. Screening by other Health depart-																	
ments personnel—Visual	126	98	1,106	431	4	884	0	281	13	409	118	43,841	212	2,539	182	48	0
(b) Referred for Further Diagnosis.....	2	33	81	21	1	102	0	30	1	102	25	2,783	10	197	87	4	0
(c) Completed Referrals	1	9	34	2	1	86	0	23	0	6	1	992	6	30	10	2	0
4. Screening by personnel—Audio-																	
meter Testing	3	93	1,497	0	0	7	0	0	0	0	32	38,875	7	608	105	94	0
(b) Referred for Further Diagnosis.....	1	0	112	0	0	0	0	0	0	0	6	5,406	1	1	8	0	0
(c) Completed Referrals	0	0	13	1	0	0	0	0	0	0	2	1,146	0	2	1	0	0
G. DENTAL HEALTH																	
1. Adm. for Dental Treatment																	
(a) Maternity Patients	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

[illegible]

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
E. CHILD HEALTH SERVICES (Cont.)																
6. Admissions to Nursing Service	802	1,289	147	221	36	94	426	167	118	78	80	202	105	97	78	19,440
Infants	1,473	923	223	263	12	52	678	185	424	38	121	193	232	59	132	24,344
1-4	3,958	1,507	228	28	1,008	239	1,367	77	488	82	151	1,557	99	214	47	66,718
5-over	1,486	2,208	230	463	33	1,042	1,042	202	159	109	151	554	201	107	95	34,358
7. Field Nursing Visits—Infants	1,713	2,517	315	496	20	155	1,382	184	607	95	288	518	397	37	173	37,276
1-4	4,711	3,882	330	49	279	888	2,469	90	374	161	170	1,287	127	77	116	46,246
5-over	1,642	2,591	115	148	3	20	43	109	59	68	80	26	28	172	27	25,049
8. Office Nursing Visits—Infants	2,559	1,708	156	2	1	30	128	141	328	59	215	2,045	9	84	31	28,602
1-4	9,241	5,720	384	0	904	129	1,151	96	328	59	215	2,045	27	265	57	157,517
5-over	6,136	3,964	95	0	453	999	1,581	125	125	105	5	1,232	105	134	33	70,392
9. Nurse-Teacher Conference																
F. SCHOOL HEALTH																
1. Pupils Examined by physician	8,823	1,772	197	0	152	34	237	80	245	0	77	561	12	457	199	28,365
with parent present	651	163	132	0	29	12	44	60	0	3	2	49	0	95	3	2,594
(b) Referred for Further Diagnosis	422	43	5	0	34	8	0	0	0	0	0	0	0	75	0	1,042
(c) Completed Referrals	8,324	944	107	0	366	266	170	94	588	0	123	8	84	243	84	51,908
2. Pupils examined by physician with parent not present	1,978	120	67	0	32	35	0	3	14	0	5	0	0	43	5	5,364
(b) Referred for Further Diagnosis	824	45	2	0	104	26	0	0	9	0	1	0	0	52	3	1,868
(c) Completed Referrals	42,457	4,558	415	0	165	227	1,047	1,556	272	827	98	8,574	96	464	55	218,801
3. Screening by other Health departments personnel—Visual	3,397	589	8	0	32	363	206	88	23	26	16	268	2	44	38	20,875
(b) Referred for Further Diagnosis	1,281	182	26	0	29	128	49	35	8	3	3	99	0	68	30	7,149
(c) Completed Referrals	29,416	368	22	0	0	447	0	3	1	759	0	5,523	0	15	0	117,264
4. Screening by other health department personnel—Audio-meter Testing	572	67	4	0	0	120	0	3	0	0	0	89	0	6	0	7,766
(b) Referred for Further Diagnosis	190	10	0	0	0	81	0	2	0	0	0	80	0	3	0	2,169
(c) Completed Referrals																
G. DENTAL HEALTH																
1. Admin. for Dental Treatment	0	54	0	0	0	10	0	0	0	0	0	0	0	0	0	68
(a) Maternity Patients																

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
G. DENTAL HEALTH (Cont.)																	
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	3,286	0	0	0	0	364	0	0	0	0	0	0	0	0	0	275	166
2. Topical Fluoride Applications	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	355	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	4,564	59	844	188	685	3,697	8	43	322	189	23	0	2,972	0	295	19,589	1,702
3. No. of Children Screened	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,683
Dentist	18	0	0	0	0	365	0	1	30	75	23	0	0	0	1	11,066	1,083
Referrals of Children Screened	0	0	155	17	389	1,322	5	41	0	2	0	0	1,258	0	228	0	1,841
Dentist	19	0	0	0	0	1,077	0	51	5	0	0	0	0	0	1	561	37
(b) Others	0	0	0	3	0	40	0	12	0	0	0	0	492	0	0	2	418
H. CHRONIC DISEASES																	
1. Admin. to Cancer Service	66	3	98	50	21	131	19	27	18	42	30	15	50	24	4	2	240
Field Visits—Cancer	16	1	193	183	30	304	17	89	40	83	86	18	494	48	10	4	843
2. Office Visits—Cancer	207	521	521	50	15	398	8	24	24	26	36	15	142	20	6	1	511
3. Admin. to Crippled Children Service	62	5	100	47	60	62	15	19	22	34	14	10	12	9	21	32	207
4. Field Visits—Crippled Children	190	13	305	337	99	286	48	41	23	118	27	15	30	6	85	69	586
5. Office Visits—Crippled Children	161	1	55	98	79	33	4	25	14	178	21	10	3	4	17	6	47
6. Admin. to Diabetes Service	19	9	14	15	33	40	4	18	9	8	10	0	4	2	16	2	87
7. Field Visits—Diabetes	19	0	58	38	51	203	4	15	23	24	26	0	6	5	104	8	1,032
8. Office Visits—Diabetes	6	23	74	14	115	110	8	58	18	19	62	0	56	1	8	2	1
9. Admin. to Heart Disease Control	5	24	13	46	4	31	2	8	14	31	7	0	1	6	10	21	211
10. Field Visits—Heart Disease	24	13	44	97	2	22	3	11	3	8	4	0	1,465	11	18	10	1,419
11. Office Visits—Heart Disease	3	82	35	292	3	3	0	8	60	3	8	0	96	0	18	10	784
J. MENTAL HEALTH																	
1. Admissions to Service	48	7	39	12	34	34	4	25	6	47	15	4	666	28	14	18	344
Cases Closed	3	1	0	0	0	5	0	0	0	29	15	0	312	6	1	2	258
2. Testing	8	10	0	0	0	1	1	4	0	4	54	0	172	0	2	0	337
3. Counseling	3	0	0	17	9	31	3	9	22	39	0	0	526	0	23	11	81
4. Local Therapy	0	0	0	0	0	53	0	0	0	0	9	0	723	0	2	0	56
5. Referred for further Service	14	0	2	0	4	14	1	0	0	7	0	1	35	2	5	5	

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Killsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
G. DENTAL HEALTH (Cont.)																	
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. No. of Children Screened	0	1	2,122	0	0	0	0	0	0	533	0	3,413	0	1	132	36	0
Dentist	0	0	0	0	0	0	0	0	0	0	0	8,634	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	2,221	0	0	0	0	0
4. Referrals of Children Screened	0	0	0	0	0	0	0	0	0	0	0	2,625	0	0	0	0	0
Dentist	0	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	447	0	0	0	0	0
5. No. of Children who Completed Referrals—Dentist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service	8	21	39	15	4	26	18	27	11	5	18	535	58	17	36	6	5
2. Field Visits—Cancer	7	56	123	41	11	125	63	44	10	11	63	1,183	9	36	102	7	8
3. Office Visits—Cancer	4	65	86	7	4	62	34	24	21	8	17	2,048	98	23	23	1	0
4. Adm. to Crippled Children Service	9	4	86	7	4	29	7	16	8	27	25	634	61	38	170	24	36
5. Field Visits—Crippled Children	1	52	254	38	6	168	59	15	6	0	18	969	101	141	120	58	59
6. Office Visits—Crippled Children	4	1	86	0	1	36	11	8	3	1	20	84	92	20	176	31	30
7. Adm. to Diabetes Service	0	61	34	17	0	45	23	1	0	6	5	541	29	22	13	12	7
8. Field Visits—Diabetes	30	108	64	10	0	23	18	3	9	1	98	1,320	17	11	34	80	24
9. Office Visits—Diabetes	3	23	76	9	2	54	51	3	40	5	3	5,243	242	27	142	25	33
10. Admissions to Heart Disease Control	2	11	613	27	72	40	33	5	2	2	4	494	16	2	25	2	30
11. Field Visits—Heart Disease	4	84	103	200	14	26	16	14	39	1	4	2,214	20	14	133	15	23
12. Office Visits—Heart Disease						148	142	18			1	949	7				
J. MENTAL HEALTH																	
1. Admissions to Service	73	11	71	0	0	10	1	48	0	4	3	504	16	61	21	6	8
2. Cases Closed	0	0	34	0	0	0	0	2	0	0	0	378	1	17	5	0	0
3. Testing	69	0	0	0	0	0	0	10	0	0	2	296	0	83	1	6	0
4. Counseling	5	9	222	0	0	0	0	9	0	11	0	1,766	0	0	3	0	0
5. Local Therapy	0	0	0	0	0	0	0	1	0	0	0	133	0	0	0	0	0
6. Referred for further Service	2	8	39	0	0	7	0	0	0	0	0	161	0	16	2	0	0

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach	Pasco
G. DENTAL HEALTH (Cont.)																	
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Topical Fluoride Applications	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. No. of Children Screened	0	0	0	0	12	0	1	4	0	1,739	0	122	0	19,894	34	107	260
Dentist	2	11	0	385	0	0	2,135	0	0	865	0	10	0	9,199	7	246	3
(b) Others	0	0	0	0	10	0	1	4	0	1	0	0	0	0	0	1,849	4
4. Referrals of Children Screened	0	0	0	0	0	0	0	0	0	31	0	0	0	687	4	880	3
Dentist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	541	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. No. of Children who Completed Referrals—Dentist	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service	27	39	61	72	8	20	32	11	11	44	19	5	9	49	6	125	82
2. Field Visits—Cancer	33	61	161	12	17	7	122	7	10	170	40	11	22	13	3	97	91
3. Office Visits—Cancer	58	28	294	4	2	13	26	13	23	110	18	12	29	790	4	780	69
4. Adm. to Crippled Children Service	93	30	288	8	17	79	46	79	11	33	29	40	21	56	33	116	52
5. Field Visits—Crippled Children	28	13	288	1	10	106	78	233	77	104	53	175	8	117	119	343	97
6. Office Visits—Crippled Children	25	19	30	11	9	13	8	12	12	70	16	17	10	23	41	21	165
7. Adm. to Diabetes Service	65	26	19	13	10	22	48	101	21	12	16	25	17	29	14	41	30
8. Field Visits—Diabetes	11	189	193	13	61	84	179	107	67	105	106	47	17	68	81	136	15
9. Office Visits—Diabetes	13	2	1	25	4	4	3	0	17	190	25	113	63	2	1	42	92
10. Admissions to Heart Disease Control	8	2	2	1	16	5	5	0	0	26	38	48	0	5	3	240	16
11. Field Visits—Heart Disease	13	2	1	1	3	4	4	0	0	3	32	5	0	2	4	412	27
12. Office Visits—Heart Disease	1	0	0	40	56	11	11	0	0	0	0	0	0	1	0	175	30
J. MENTAL HEALTH																	
1. Admissions to Service	6	2	312	15	5	8	19	14	3	34	23	24	0	447	2	105	13
2. Cases Closed	0	0	226	1	0	0	0	0	0	0	15	1	0	344	0	3	2
3. Testing	0	0	142	0	5	0	5	0	0	0	30	0	0	379	0	0	1
4. Counseling	0	1	875	23	0	14	8	0	0	34	7	3	0	84	0	28	15
5. Local Therapy	0	0	1,02	0	0	0	0	0	0	0	0	0	0	263	0	1	0
6. Referred for further Service	1	1	39	0	1	2	9	12	3	1	7	0	0	2	0	24	6

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
G. DENTAL HEALTH (Cont.)																
(b) 1-4	69	1	0	0	0	1	0	0	0	0	0	1	0	0	0	90
(c) 5-over	608	989	0	0	1	5	0	0	0	0	0	379	0	0	0	11,157
2. Topical Fluoride Applications																
(b) 1-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
(c) 5-over	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	358
3. No. of Children Screened	42,229	3,778	0	0	0	2	0	197	0	0	0	3,590	0	0	0	101,786
(b) Others	0	298	4	0	54	176	0	0	0	0	0	13	0	0	0	30,708
4. Referrals of Children Screened	22,902	2,806	0	0	0	13	0	0	0	0	0	2,363	0	0	0	53,299
Dentist	0	174	4	0	20	130	0	106	0	0	0	0	0	0	0	11,802
(b) Others	4,132	650	0	0	0	7	0	7	0	0	0	486	0	0	0	8,725
5. No. of Children who Completed Referrals-Dentist	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	2,044
(b) Others																
H. CHRONIC DISEASES																
1. Adm. to Cancer Service	268	420	34	9	79	49	15	42	8	27	10	159	3	19	37	3,449
2. Field Visits-Cancer	696	205	67	27	61	220	26	76	18	75	15	438	6	14	37	6,960
3. Office Visits-Cancer	623	1,352	10	4	67	39	6	55	3	17	9	167	25	15	60	8,914
4. Adm. to Crippled Children Service	28	95	49	33	76	35	30	41	53	267	5	309	58	135	22	3,569
5. Field Visits-Crippled Children	67	404	137	120	94	117	157	92	118	82	8	8	9	95	83	8,510
6. Office Visits-Crippled Children	7	73	22	12	172	13	11	31	17	25	10	84	6	27	5	3,393
7. Adm. to Diabetes Service	49	110	10	2	34	30	8	18	6	101	8	1,984	57	48	10	1,918
8. Field Visits-Diabetes	186	662	49	8	83	76	22	13	29	69	50	290	29	198	42	7,436
9. Office Visits-Diabetes	454	167	5	0	10	29	5	26	9	31	8	15	53	14	6	9,768
10. Admissions to Heart Disease Control	105	20	12	1	10	44	9	7	9	18	15	78	7	11	12	1,888
11. Field Visits-Heart Disease	1,148	20	35	18	28	376	25	7	31	2	42	15	81	24	24	8,724
12. Office Visits-Heart Disease	138	20	5	2	10	8	2	13	63	0	0	2	2	0	0	4,085
J. MENTAL HEALTH																
1. Admissions to Service	47	354	97	50	32	90	14	2	8	18	1	260	0	27	10	4,203
2. Cases Closed	6	278	0	28	0	36	0	0	1	0	0	290	0	0	0	2,491
3. Testing	0	262	83	0	0	37	1	0	0	0	0	129	0	0	0	2,003
4. Counseling	12	681	24	117	12	121	7	0	3	2	1	66	0	0	6	5,021
5. Local Therapy	0	7	0	6	0	5	0	0	0	0	0	23	0	0	0	2,403
6. Referred for further Service	7	91	3	23	8	41	2	2	0	9	0	0	1	0	4	717

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
J. MENTAL HEALTH (Cont.)																	
8. Family Conferences	189	19	118	21	21	58	1	21	35	42	21	3	3,316	8	27	24	215
9. Conferences-Other Agencies	65	24	15	1	4	30	0	48	36	22	273	0	49	59	21	2	116
K. MISCELLANEOUS																	
1. Adm. to Morbidity Service	244	83	151	177	18	97	5	7	22	149	85	122	91	0	72	5	394
2. Field & Office Visits-Morbidity	392	143	642	478	40	568	8	8	161	241	250	189	474	0	303	15	2,246
3. General Medical Examinations	213	17	56	106	44	1,093	20	483	65	53	2	48	2,627	140	42	1,026	2,611
4. Health Cards Issued	2,712	178	2,033	314	1,330	10,608	124	527	406	589	794	614	15,129	689	328	7,558	8,393
5. Visits in the Interest of Vital Statistics	2	4	29	39	42	18	1	45	12	46	6	2	64	42	115	16	24
M. NURSING HOMES																	
1. Number of Nursing Homes	4	0	5	0	6	5	0	1	0	1	0	4	94	0	0	12	23
2. Admitted to Service	44	0	48	0	18	120	0	10	0	1	0	9	850	0	0	89	145
3. Visits to Nursing Homes																	
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	1	0	0	1	12	280	0	0	0	2	11	2	13	0	1	1	768
2. Approved Water Supplies Installed, New Public Water Connections	56	0	0	0	1	6	1	0	0	1	2	0	26	0	1	5	1,224
3. New Specification Privies Installed	10	0	1	0	0	0	0	1	0	0	0	0	0	0	0	20	185
4. Percolation Water Table or Soil Log Test	1,067	0	323	19	5,400	428	0	0	0	185	25	81	234	0	36	1,213	92
5. Subdivision Analysis	31	0	8	1	61	145	0	0	0	0	0	3	25	0	1	4	75
6. Pollution Survey	5	0	11	0	0	209	0	6	0	1	0	1	1	0	0	89	74
7. New Specification Septic Tanks Installed	727	26	457	67	3,037	7,317	29	369	33	74	158	371	293	41	26	1,141	2,709
8. Rabies-Number of Animal Bites Investigated	200	4	36	30	157	589	5	37	2	51	28	22	2,514	16	0	663	754
9. Field Visits for Rabies Investigation	557	14	60	45	233	1,325	5	122	7	171	53	66	7,884	19	0	64	1,822
10. Complaints Investigated	654	2	233	41	303	975	18	18	27	27	208	25	6,938	105	33	2,381	2,569
11. Nuisances Corrected	289	1	275	27	61	445	13	77	10	29	66	19	4,303	13	18	948	2,213
12-19. Field Visits	2,744	1,584	3,581	154	9,440	12,710	285	1,307	570	686	890	1,914	30,707	676	194	6,874	18,945

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
J. MENTAL HEALTH (Cont.)																	
8. Family Conferences	49	15	126	0	0	21	1	19	0	26	1	786	28	133	40	11	11
9. Conferences-Other Agencies	20	0	222	0	0	7	0	63	0	58	0	229	4	141	7	0	0
K. MISCELLANEOUS																	
1. Adm. to Morbidity Service	55	55	31	106	42	66	268	52	43	6	32	781	11	37	36	1	54
2. Field & Office Visits-Morbidity	211	192	443	269	92	330	1,836	116	85	62	49	3,595	12	92	94	1	122
3. General Medical Examinations	18	38	13	35	5	2	20	4	32	113	191	690	286	0	23	23	1
4. Health Cards Issued	106	402	831	121	83	379	404	523	496	311	984	39,231	183	864	506	256	8
5. Visits in the Interest of Vital Statistics	24	7	361	1	0	31	9	0	35	5	23	0	0	11	38	15	1
M. NURSING HOMES																	
1. Number of Nursing Homes	0	0	1	0	0	0	0	1	0	2	5	23	0	2	0	1	0
2. Visits to Nursing Homes	0	0	1	0	0	0	0	36	0	6	9	515	0	20	0	16	0
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	3	0	48	0	0	0	0	9	2	0	102	111	0	0	1	3	0
2. Approved Water Supplies Installed, New Public Water Connections	1	2	324	0	0	54	0	4	3	0	5	1,548	2	1	2	1	0
3. New Specification Privies Installed	0	0	131	0	0	0	0	1	5	0	0	149	0	0	14	10	4
4. Percolation Water Table or Soil Log Test	27	10	22	2	9	6	6	0	6	4	45	115	4	20	13	10	21
5. Subdivision Analysis	4	1	2	0	0	0	0	0	0	0	25	21	0	7	3	0	0
6. Pollution Survey	6	0	27	0	2	0	23	0	7	0	6	22	0	0	0	1	0
7. New Specification Septic Tanks Installed	30	27	128	77	8	42	23	66	48	53	375	3,108	27	252	23	10	11
8. Rabies-Number of Animal Bites Investigated	3	12	7	2	10	4	7	2	4	0	81	1,878	7	8	15	22	0
9. Field Visits for Rabies Investigation	4	34	17	7	13	4	13	5	10	1	694	8,212	4	38	28	57	0
10. Complaints Investigated	38	433	99	5	26	13	10	56	94	39	391	4,062	41	99	12	68	2
11. Nuisances Corrected	8	265	221	5	10	2	1	14	32	20	157	1,891	23	31	7	54	5
12-19. Field Visits	178	482	790	783	168	560	371	893	510	424	3,591	28,482	192	569	527	774	40

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Myakka	Okechobee	Orange	Osceola	Palm Beach	Pasco
J. MENTAL HEALTH (Cont.)																
8. Family Conferences	4	1	6	26	1	16	26	26	11	44	54	29	1,238	3	183	13
9. Conferences-Other Agencies	0	3	44	31	0	3	35	30	2	61	61	19	1,927	3	85	12
K. MISCELLANEOUS																
1. Adm. to Morbidity Service	17	123	39	92	81	2	32	406	13	170	101	309	15	22	285	43
2. Field & Office Visits-Morbidity	28	224	48	400	713	3	85	409	34	407	202	1,573	23	81	1,253	100
3. General Medical Examinations	30	18	34	139	66	1	406	256	0	28	3	234	10	52	139	5
4. Health Cards Issued	952	2,627	3,529	683	157	211	2,269	2,148	0	772	711	1,115	58	355	5,159	2,509
5. Visits in the Interest of Vital Statistics	13	0	6	10	1	8	9	3	14	21	46	28	4	2	18	45
M. NURSING HOMES																
1. Number of Nursing Homes	14	5	3	1	0	1	8	2	1	0	0	0	1	9	21	7
2. Visits to Nursing Homes	30	12	19	11	0	16	81	6	12	0	0	0	8	34	152	44
P. SANITATION																
1. Approved Water Supplies Installed, Private & Semi-Public	3	1	0	0	0	4	1	93	24	0	1	0	1	32	0	0
2. Approved Water Supplies Installed, New Public Water Connections	0	0	3	0	0	0	4	0	58	0	0	31	2	4	0	0
3. New Specification Privies Installed	0	0	0	7	0	0	101	30	0	2	6	0	0	0	0	0
4. Percolation Water Table or Soil Log Test	133	9	14	1	0	6	117	160	207	0	44	277	10	45	260	9
5. Subdivision Analysis	13	2	2	1	0	5	4	4	3	0	3	37	0	14	10	0
6. Pollution Survey	5	3	328	0	0	1	3	12	3	7	0	0	0	0	0	0
7. New Specification Septic Tanks Installed	787	433	432	65	2	18	61	328	299	23	159	330	21	165	2,325	98
8. Rabies-Number of Animal Bites Investigated	30	93	248	10	1	17	182	187	4	138	1	95	31	38	246	13
9. Field Visits for Rabies Investigation	80	174	737	29	1	44	303	303	3	218	37	69	40	41	534	32
10. Complaints Investigated	184	102	298	14	6	36	337	608	103	285	29	219	7	124	765	57
11. Nuisances Corrected	90	28	60	10	0	11	261	410	29	331	2	116	6	1,981	433	513
12-19. Field Visits	2,075	1,007	1,917	849	168	481	2,369	1,553	844	3,958	685	2,928	222	948	10,916	361

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
J. MENTAL HEALTH (Cont.)																
8. Family Conferences	125	508	72	210	60	143	62	3	18	16	1	552	0	86	29	8,972
9. Conferences-Other Agencies	13	155	62	377	58	197	24	1	7	8	0	291	0	50	6	5,081
K. MISCELLANEOUS																
1. Adm. to Morbidity Service	1,141	528	133	1	161	171	46	34	83	28	78	254	18	98	17	7,958
2. Field & Office Visits-Morbidity	10,448	1,728	262	1	414	1,433	90	46	381	92	194	4,072	87	166	31	38,916
3. General Medical Examinations	205	28	23	0	52	214	16	0	0	2	58	559	21	144	179	11,036
4. Health Cards Issued	24,090	254	1,045	1,228	349	2,710	714	666	311	511	83	2,635	383	660	327	157,820
5. Visits in the Interest of																
6. Vital Statistics	0	231	1	4	28	99	15	6	14	17	14	79	10	2	6	1,822
M. NURSING HOMES																
1. Number of Nursing Homes	30	13	11	4	0	10	11	1	1	0	0	19	0	0	1	377
2. Admitted to Service	545	171	21	27	0	50	50	9	3	0	0	267	0	0	11	3,640
3. Visits to Nursing Homes																
P. SANITATION																
1. Approved Water Supplies Installed, Private & Semi-Public	0	4	21	17	3	131	6	0	0	7	0	12	0	30	11	1,869
2. Approved Water Supplies Installed, New Public Water Connections	2	3	18	220	1	14	0	0	0	40	7	2	0	49	0	3,904
3. New Specification Privies Installed	3	4	3	1	0	4	9	0	32	0	26	34	0	4	0	812
4. Percolation Water Table or Soil Log Test	2,940	622	120	476	189	1,281	497	2	7	17	0	215	0	0	0	18,470
5. Subdivision Analysis	5	12	15	4	6	134	28	0	1	0	0	17	0	7	0	1,025
6. Pollution Survey	18	4	0	2	3	17	0	0	0	1	6	5	0	0	0	974
7. New Specification Septic Tanks Installed	5,192	1,158	102	479	82	1,788	568	13	21	62	36	1,301	1	95	40	42,372
8. Rabies Number of Animal Bites Investigated	171	310	21	42	26	123	66	18	13	22	2	174	22	8	14	9,944
9. Field Visits for Rabies Investigation	356	691	16	66	27	208	192	48	2	36	0	319	54	12	0	25,961
10. Complaints Investigated	1,916	560	63	174	44	447	311	16	14	21	2	414	40	159	20	29,530
11. Nuisances Corrected	632	374	6	141	7	149	92	10	12	14	2	182	6	33	18	15,857
12-19. Field Visits	19,357	5,332	310	1,395	594	6,037	1,725	453	332	498	986	1,901	201	613	53	226,433

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Escambia
B. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	453	18	214	80	59	799	23	25	29	108	65	55	5,646	16	12	846	455
2. Field Visits to Food-handling Establishments	2,530	364	1,564	732	209	1,723	295	326	123	819	268	335	36,231	129	99	2,209	2,197
3. Number of Food-handlers' Certificates Awarded	0	0	0	0	0	108	0	0	0	0	0	0	5,386	3	0	0	0
4. Dairy Farms Admitted to Service	23	7	6	5	3	1	12	2	1	3	0	5	81	4	0	0	51
5. Field Visits to Dairy Farms	238	10	133	63	11	6	276	47	3	68	0	43	1,444	122	0	0	681
6. Milk & Milk Products Plants Admitted to Service	6	0	8	2	1	2	0	2	0	2	3	1	108	1	0	0	3
7. Field Visits to Milk & Milk Products Plants	86	0	39	21	20	54	0	2	0	24	18	26	3,718	2	0	0	166
8. Cows Tuberculin Tested	946	0	75	1	4	0	0	0	95	0	0	0	5,086	325	0	0	4,956
9. Cows Bangs Tested	5	0	74	82	4	0	0	0	95	0	0	0	0	162	0	0	5,007
10. Dairy Farms under Mastitis Control Program	23	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0
V. HEALTH INFORMATION																	
1. Meetings Attended	578	25	51	55	58	211	18	45	83	153	103	5	1,316	64	27	186	589
2. Lectures and Motion Pictures	373	61	152	43	52	459	22	38	48	54	48	2	1,747	46	27	191	588
3. Showings	6	1	1	0	4	4	0	0	0	0	0	0	0	0	0	1	7
4. Radio & Television Programs	28	15	0	21	2	34	1	10	4	78	10	2	103	0	31	0	43
5. News Articles Published	1	0	1	0	2	0	0	0	3	2	3	0	8	0	0	0	0
6. Exhibits Displayed																	
X. LABORATORY																	
1-21. Specimens Examined	12,898	1,395	8,426	1,697	5,555	18,198	1,313	2,373	1,695	2,103	1,376	3,741	81,206	2,550	1,832	22,074	26,196

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson	Lafayette
B. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments	13	26	70	4	18	97	32	55	25	14	196	2,642	64	66	122	52	7
2. Admitted to Service	40	244	191	160	55	815	309	189	155	67	501	20,027	630	104	861	365	57
3. Establishments	0	0	0	0	0	0	0	0	0	0	0	58	0	1	0	0	0
4. Number of Food-handlers	1	0	0	1	8	1	1	18	3	0	4	102	14	8	35	9	22
5. Dairy Farms Admitted to Service	2	0	159	5	91	18	11	73	41	0	35	2,651	271	88	345	137	993
6. Field Visits to Dairy Farms	0	0	0	0	0	0	0	1	2	0	2	19	0	4	6	1	0
7. Milk & Milk Products Plants	0	0	0	0	0	0	0	0	0	0	0	1,192	0	24	30	1	0
8. Field Visits to Milk & Milk	0	0	28	0	0	0	0	0	2	0	19	20,770	492	702	0	964	191
9. Products Plants	4	0	452	0	0	0	0	372	0	0	0	2,841	752	482	0	827	1,159
10. Cows Tuberculin Tested	3	0	3,682	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11. Cows Bangs Tested	0	0	0	0	0	0	0	2	0	0	0	102	3	0	0	0	0
12. Dairy Farms under Mastitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13. Control Program	32	12	179	2	31	44	21	105	44	11	32	601	21	39	36	55	13
V. HEALTH INFORMATION																	
1. Meetings Attended	1	1	131	9	2	142	12	19	43	5	10	584	44	20	95	106	12
2. Lectures and Motion Pictures	0	0	0	0	0	48	0	3	0	1	3	11	34	0	0	0	0
3. Showings	25	1	26	0	5	4	4	2	14	2	15	56	33	13	4	23	9
4. Radio & Television Programs	0	1	2	1	0	0	18	0	0	0	0	0	0	1	0	0	0
5. News Articles Published	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Exhibits Displayed	925	938	4,462	592	684	2,810	2,669	2,769	1,712	654	2,478	109,749	2,602	3,588	5,514	2,085	860
X. LABORATORY																	
1-21. Specimens Examined	3,094	8,713	22,529	3,784	989	2,592	10,766	5,822	1,177	4,508	3,542	3,536	639	10,949	2,555	20,623	3,467

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Ocala	Orange	Osceola	Palm Beach	Pasco	
B. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments	123	282	366	34	9	69	240	189	118	140	19	102	32	561	89	208	
2. Admitted to Service	311	684	2,079	96	106	339	711	611	560	532	218	410	99	2,158	338	560	
3. Field Visits to Food-handling Establishments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4. Number of Food-handlers	13	7	13	1	0	9	30	18	4	0	3	2	4	0	4	10	
5. Certificates Awarded to Service	42	77	126	5	0	183	112	232	35	0	14	38	32	0	30	186	
6. Field Visits to Dairy Farms	4	1	10	1	0	1	3	6	3	6	2	2	1	0	0	0	
7. Milk & Milk Products Plants Admitted to Service	7	26	79	13	0	1	35	77	10	36	15	4	3	0	0	0	
8. Field Visits to Milk & Milk Products Plants	833	488	1,124	0	0	164	3,995	1,623	1,190	0	0	0	236	0	0	1,108	
9. Cows Tuberculin Tested	528	186	1	0	0	216	657	1,150	779	0	0	85	236	0	0	373	
10. Cows Bangs Tested	0	0	0	0	0	0	0	17	3	0	1	1	0	0	0	0	
11. Dairy Farms under Mastitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12. Control Program	38	40	15	35	14	65	491	29	52	226	46	35	6	59	74	17	
V. HEALTH INFORMATION																	
1. Meetings Attended	14	15	61	68	27	35	320	146	29	153	159	47	10	711	7	61	
2. Lectures and Motion Pictures	2	0	8	0	0	2	6	1	0	1	5	1	0	0	0	0	
3. Showings	0	1	177	0	1	11	44	19	2	34	49	4	2	49	0	17	
4. Radio & Television Programs	0	0	1	0	0	2	4	0	0	1	18	1	0	0	0	2	
5. News Articles Published	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
6. Exhibits Displayed	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
X. LABORATORY																	
1-21. Specimens Examined	3,094	8,713	22,529	3,784	989	2,592	10,766	5,822	1,177	4,508	3,542	3,536	639	10,949	2,555	20,623	3,467

TABLE 5 (continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1957

	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1957
B. PROTECTION OF FOOD AND MILK																
1. Food-handling Establishments	2,479	886	46	196	67	270	141	65	83	79	23	1,043	24	114	53	21,101
2. Admitted to Service	12,028	4,342	107	1,345	228	965	679	271	593	262	69	3,465	186	336	373	111,574
3. Number of Food-handlers	0	25	0	0	0	0	0	0	0	1	0	1	0	0	0	5,583
4. Certificates Awarded	36	54	9	4	27	153	45	8	8	0	4	27	0	8	33	840
5. Dairy Farms Admitted to Service	709	589	53	27	199	153	45	72	113	5	32	75	0	79	220	11,274
6. Field Visits to Dairy Farms	66	10	1	6	0	6	2	1	0	0	0	13	0	2	1	355
7. Milk & Milk Products Plants	599	71	6	32	0	46	5	1	0	0	1	39	0	10	2	7,995
8. Field Visits to Milk & Milk Products Plants	5,574	4,681	0	246	1	108	0	52	326	0	0	0	0	938	522	58,652
9. Cows Tuberculin Tested	5,595	347	0	244	0	0	0	52	339	0	0	0	0	926	493	22,382
10. Cows Banged Tested	38	54	5	0	0	0	0	0	0	0	0	0	0	8	0	262
11. Dairy Farms under Mastitis Control Program	654	317	81	57	105	314	50	11	60	87	34	90	0	56	10	8,481
V. HEALTH INFORMATION																
1. Meetings Attended	1,651	490	48	12	22	511	41	18	76	88	9	62	0	63	11	10,756
2. Lectures and Motion Pictures	18	18	35	0	0	11	2	0	11	0	0	1	0	17	0	307
3. Showings	186	109	16	0	2	114	3	21	11	9	19	146	0	37	0	1,705
4. Radio & Television Programs	2	6	0	0	0	5	0	2	2	13	0	1	0	48	0	150
5. News Articles Published																
6. Exhibits Displayed																
X. LABORATORY																
1-21. Specimens Examined	40,619	16,691	2,599	2,376	2,131	2,739	1,502	2,174	5,651	2,073	992	5,417	1,506	4,094	2,591	542,099

BUREAU OF VITAL STATISTICS

EVERETT H. WILLIAMS, JR., M.S., Hyg.
Director

A summary of the activities of the Bureau of Vital Statistics and a brief analysis of statistical data based on preliminary tabulations are given in this text. An analysis of vital statistics and morbidity data for 1957 in greater detail is presented in Supplements 1 and 2 of this report under the titles FLORIDA VITAL STATISTICS, 1957, and FLORIDA MORBIDITY STATISTICS, 1957.

POPULATION

The population of the state as of July 1, 1957, was estimated to be 4,238,200, an increase of 8.7 per cent over the figure of 3,897,400 for the previous year. The white population was estimated to be 3,439,000 persons and the nonwhite population 799,200.

These population estimates were prepared by the Bureau of Business and Economic Research of the University of Florida by a method which is essentially Census Method II. Under this method the population enumerated in 1950 is increased by resident births, decreased by resident deaths, and adjusted for an estimated amount of in or out migration for the period from April 1, 1950 to July 1, 1957. This method was applied to individual counties, the state total representing the sum of the individual county estimates.

Data on births and deaths were supplied by this bureau. Estimates of migration were based on school attendance data supplied by the State Department of Education.

BIRTHS

Provisional birth figures for the first time topped the 100,000 mark. There were 104,134 births in 1957 compared with 96,969 in 1956, a rise of 7.4 per cent. White births increased from 69,557 in 1956 to 75,136 in 1957, and nonwhite births from 27,412 to 28,998. The white increase represents a rise of 8.0 per cent compared with the nonwhite rise of 5.8 per cent.

Estimated birth rates were as follows: white, 21.8; nonwhite, 36.3; and total, 24.6; per 1,000 population.

DEATHS

Provisional tabulations indicate a total of 39,964 deaths for 1957 compared with 36,876 for 1956. Percentagewise, the increase in births was not as great as the increase in deaths. Deaths increased 8.4 per cent

compared with a 7.4 per cent increase in births. Provisional death rates per 1,000 population for 1957 are: total, 9.4; white, 9.2; nonwhite, 10.5.

Chronic illness again accounted for the largest part of the mortality in 1957. Deaths from the combined grouping of major cardiovascular-renal disease (including diseases of the heart, blood vessels and kidneys) totaled 20,787. Over half (52 per cent) of the deaths in 1957 were included in this category.

Within the grouping of cardiovascular-renal disease, heart disease was the largest component, with 14,269 deaths attributed to this cause with a rate of 336.7 per 100,000 population. Cerebral vascular disease deaths totaled 4,777 and deaths due to general arteriosclerosis, 580. Rates for these causes were 112.7 and 13.7 per 100,000. There were only 14 deaths from rheumatic fever, but 408 deaths were attributed to chronic rheumatic heart disease.

Another major cause of death in the chronic illness category was cancer. The cancer death rate was 143.1 per 100,000 population. There were 6,065 deaths.

The number of deaths included under the major title of Infective and Parasitic Diseases, increased from 587 in 1956 to 608 in 1957. The rate in 1957 was slightly lower, however, 14.3 compared with 15.1 in the previous year, indicating that the rise is accounted for chiefly by a rise in population.

On the basis of the preliminary figures, there were 260 tuberculosis deaths in 1957 compared with 244 in 1956. Preliminary rates per 100,000 population in both years are: 1957, 6.1; 1956, 6.3.

Syphilis mortality also continued to decline. There were 121 deaths due to syphilis and its sequelae in 1957 with a rate of 2.9 per 100,000. This may be compared with 126 deaths in 1956 and a rate of 3.2.

In 1957, there were 26 deaths attributed to meningococcal infections compared with 19 in the previous year. Deaths from this cause exceeded the number from several other infective diseases including poliomyelitis (6 deaths) and diphtheria (5 deaths).

Other important causes of mortality in 1957 were: accidents (1,087 motor vehicle and 1,561 other), suicide (493 deaths), homicide (421 deaths), cirrhosis of the liver (537 deaths), congenital malformations (524 deaths), and diseases of early infancy (1,868 deaths).

MARRIAGE AND DIVORCE

Marriages increased slightly from 31,666 in 1956 to 32,288; an increase of 2 per cent. Divorces and annulments decreased, possibly due to the introduction of more stringent requirements for divorce in October 1957. There were 18,800 divorces and annulments in 1957 compared with 20,245 in 1956. There were 58 divorces per 100 marriages.

ACTIVITIES

The year 1957 was a year of major changes in the Bureau of Vital Statistics. During the year a complete survey of work procedures was made and a chart prepared of the revised procedures. As a result, there was a major change in the routing of applications for certified copies which has resulted in speedier service to the general public. A new section was formed in the bureau for processing mail and fee accounting, which is another factor in the improvement of service to the general public. It has also created a better control over fee accounts. These changes have naturally created many administrative problems and the process of rewriting all work procedures is not yet completed.

During the year the bureau discontinued the use of the U. S. Public Health Service forms for birth notifications. New forms were designed and are mailed to new parents with a picture of the child's birth certificate. These pictures are obtained at a very low cost by making prints from microfilm copies. The purpose of this procedure is to give the new parents an opportunity to view the birth certificate and make sure all items are correct before the certificate is bound in our records.

The statistical section of our office has had many administrative problems resulting from the great expansion of IBM tabulating equipment in the preceding year. In addition to all of the functions which were first processed by machine in 1956, the administrative payroll was added. The statistical section also processed tabulations and analyses for several special studies for other bureaus which will be described elsewhere in this report. The numerous problems caused by so many new procedures being placed on tabulating equipment has naturally resulted in many of our statistical reports being published somewhat later than usual. This is a temporary problem and will be straightened out in the near future.

The routine work load of the office has continued to increase. (See "Activities During the Years 1956 and 1957"). A tremendous increase resulted from a change in policy concerning amendment of certificates. This office is now operating as a quasi-judicial unit in making decisions on corrections of records in some cases which formerly required the decision of a court of competent jurisdiction. This has resulted in a 37.3 increase in the number of amended certificates filed for correction of parentage and legitimation.

A consolidated VITAL STATISTICS SCOREBOARD is shown as Table 12. Counties are listed in order of rank showing their relative efficiency in birth and death registration. It is gratifying to note the improvement which has taken place in some counties. On the other hand, it is discouraging that the state average has shown little change. It is hoped that the county health departments will take remedial action in those counties which are at the bottom of the list and have shown little or no improvement. Proper registration of births and deaths in each county is the responsibility of the county health officer.

Articles by staff members:

Thorner, Robert M., Population Growth in Three South Florida Counties - Mimeographed by State Board of Health.

Thorner, R.M., Bond, J.O., Pertussis in Florida, Pub. Health Rep., 72:795-800, Sept. 1957.

TABLE 6
ACTIVITIES OF THE BUREAU OF VITAL STATISTICS
DURING THE YEARS 1956 AND 1957

Activity	1956	1957	Per Cent Change
Current certificates filed	186,384	195,587	+ 4.9
Delayed birth certificates filed.....	4,202	4,134	- 1.6
Adoption decrees received	2,889	3,159	+ 9.3
Amended certificates filed for adoptions	3,002	2,809	- 6.4
Amended certificates filed for legitimations and corrections of parentage	743	1,020	+ 37.3
Requests for certifications			
Total	105,479	108,696	+ 3.1
Fee paid	90,600	90,494	- 0.1
Free	14,877	18,202	+ 22.3
Photostats made	96,683	105,063	+ 9.0
Birth registration cards made	29,683	27,222	- 8.3
Fees collected and transmitted to State Treasurer	\$134,084.69	\$136,627.57	+ 1.9

TABLE 7
RESIDENT BIRTHS AND DEATHS WITH RATES PER 1,000
POPULATION, FLORIDA, 1931 - 1957

YEAR	POPULATION	BIRTHS	BIRTH RATE	DEATHS	DEATH RATE
1957*	4,238,200	104,134	24.6	39,964	9.4
1956	3,897,400	97,320	25.0	36,705	9.4
1955	3,643,562	89,112	24.5	33,295	9.1
1954	3,481,528	84,831	24.4	31,503	9.0
1953	3,111,100	80,087	25.7	30,529	9.8
1952	3,006,400	74,219	29.7	29,136	9.7
1951	2,901,800	70,431	24.3	27,857	9.6
1950	2,797,100	64,370	23.0	26,525	9.5
1949	2,692,500	61,642	22.9	25,317	9.4
1948	2,587,800	59,685	23.1	24,505	9.5
1947	2,483,200	60,201	24.2	24,150	9.7
1946	2,378,500	54,347	22.8	22,750	9.6
1945	2,273,900	48,839	21.5	22,594	9.9
1944	2,196,195	49,186	22.4	23,251	10.6
1943	2,125,935	46,783	22.0	23,213	10.9
1942	2,055,675	40,675	19.8	21,144	10.3
1941	1,985,415	37,351	18.8	21,438	10.8
1940	1,915,155	33,696	17.6	21,458	11.2
1939	1,853,660	32,437	17.5	20,209	10.9
1938	1,795,322	31,101	17.3	19,949	11.1
1937	1,736,984	29,529	17.0	19,825	11.4
1936	1,678,646	28,116	16.7	20,050	11.9
1935	1,620,308	28,058	17.3	19,059	11.8
1934	1,585,596	26,722	16.9	19,518	12.3
1933	1,554,000	25,647	16.5	18,112	11.7
1932	1,530,356	27,242	17.8	17,721	11.6
1931	1,502,736	26,789	17.8	17,291	11.5

* 1957 data based upon preliminary totals.

CAUSE OF DEATH (Numbers in parentheses refer to the International List of Causes of Death)	Rate Per 100,000 Population			
	Total	White	Colored	Colored
ALL CAUSES	39,964	31,554	8,410	10.5*
Tuberculosis of respiratory system (001-008)	251	162	89	11.1
Tuberculosis, other forms (010-019)	9	4	5	7.9
Syphilis and its sequelae (020-029)	121	58	63	1.7
Typhoid fever (040)	1	1	0	***
Dysentery, all forms (045-048)	11	2	9	1.1
Diphtheria (055)	5	1	4	1.5
Meningococcal infections (057)	26	18	8	1.0
Acute poliomyelitis (080)	9	6	3	1.1
Acute infectious encephalitis (082)	11	8	3	1.4
Measles (085)	0	0	0	0
Typhus and other rickettsial diseases (100-108)	158	88	70	8.8
All other diseases classified as infective and parasitic (109 to 138 with exception of above causes)	6,065	5,216	849	106.2
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-205)	505	406	99	12.4
Diabetes mellitus (260)	94	54	40	5.0
Anemias (290-293)	20,787	17,300	3,487	436.3
Major cardiovascular-renal disease	4,777	3,688	1,089	136.3
Cerebral vascular disease (330-334)	14	8	6	0.8
Rheumatic fever (400-402)	14,269	12,244	2,025	253.4
Diseases of the heart	408	349	59	7.4
Chronic rheumatic heart disease (410-416)	10,437	9,492	945	118.2
Arteriosclerotic heart disease, coronary disease (420)	1,062	827	235	29.4
Nonrheumatic chronic endocarditis & myocardial degeneration (421, 422)	1,613	1,003	610	76.3
Hypertension with heart disease (440-445)	1,749	1,573	176	22.0
Other diseases of heart (430-434)	276	189	87	10.9
Hypertension without heart disease (444-447)	580	503	77	9.6
General arteriosclerosis (450)	488	419	69	8.6
Other circulatory disease (451-468)	363	249	114	16.8
Chronic and unspecified nephritis (592-594)	142	61	81	10.1
Influenza (480-483)	1,122	696	426	53.3
Pneumonia (490-493)	226	194	32	4.0
Ulcer of stomach and duodenum (540-541)	260	200	60	7.5
Gastritis, duodenitis, enteritis & colitis, except diarrhea of the newborn (543, 571, 572)	314	135	179	22.4
Cirrhosis of liver (581)	537	461	76	9.5
Acute nephritis and nephrosis (590, 591)	68	47	21	2.6
Complications of pregnancy, childbirth and the puerperium (640-652, 660, 670-689)	524	395	129	16.1
Birth injuries, postnatal asphyxia & atelectasis (760-762)	825	534	291	36.4
Congenital malformations (750-759)	125	57	68	8.5
Infection of the newborn (763-768)	918	541	377	47.2
Other diseases, peculiar to early infancy, and immaturity unqualified (769-776)	688	415	273	34.2
Symptoms, senility, and ill-defined causes (780-795)	2,532	1,913	619	77.4
All other diseases (residual)	1,087	838	249	31.2
Motor vehicle accidents (810-835)	1,561	1,131	430	53.8
All other accidents (800-802, 840-862)	421	146	275	3.0
Suicide and self-inflicted injury (963)	970	799	171	21.6
Homicide and operations of war (964, 965, 980-999)	421	118	303	37.9
Infant mortality (deaths under one year of age)	3,312	1,834	1,478	51.0**

* Rate per 1,000 population

** Rate per 1,000 live births

*** Rate less than 0.05

TABLE 9

ESTIMATED POPULATION AND PRELIMINARY TOTALS OF
BIRTHS, DEATHS, AND INFANT DEATHS, BY RACE,
BY COUNTY, FLORIDA, 1957

COUNTY	Population Estimate 1957	BIRTHS			DEATHS			INFANT DEATHS		
		Total	White	Colored	Total	White	Colored	Total	White	Colored
STATE	4,238,200	104,134	75,136	28,998	39,964	31,554	8,410	3,312	1,834	1,478
Alachua	66,400	1,903	1,235	668	536	296	240	64	33	31
Baker	7,400	196	141	55	48	33	15	6	4	2
Bay	59,600	1,993	1,591	402	384	314	70	42	32	10
Bradford	12,600	317	230	87	124	90	34	17	8	9
Brevard	72,000	2,323	1,942	381	517	412	105	83	51	32
Broward	249,600	6,009	3,925	2,084	2,061	1,634	427	181	77	104
Calhoun	7,500	197	164	33	65	57	8	2	2	2
Charlotte	5,800	103	80	23	95	85	10	4	4	0
Citrus	6,600	165	116	49	86	69	17	5	3	2
Clay	18,100	613	525	88	126	93	33	15	12	3
Collier	14,000	299	238	61	96	72	24	14	7	7
Columbia	19,900	532	321	211	186	97	89	12	4	8
Dade	829,000	18,672	14,036	4,636	7,171	6,208	963	560	340	220
DeSoto	10,100	182	121	61	136	97	39	7	1	6
Dixie	4,000	116	90	26	58	44	14	6	5	1
Duval	438,600	11,662	8,315	3,347	3,440	2,238	1,202	347	186	161
Escambia	157,800	5,575	4,191	1,384	1,259	888	371	215	117	98
Flagler	5,300	158	65	93	58	28	30	14	2	12
Franklin	5,300	140	104	36	68	43	25	4	1	3
Gadsden	44,600	1,133	290	843	351	136	215	63	5	58
Gilchrist	3,100	69	54	15	21	14	7	2	1	1
Glades	2,400	51	26	25	23	12	11	4	0	4
Gulf	9,500	328	225	103	51	22	29	12	3	9
Hamilton	8,600	255	100	155	94	56	38	9	3	6
Hardee	12,400	244	203	41	114	103	11	11	6	5
Hendry	6,800	201	123	78	59	34	25	6	3	3
Hernando	9,000	248	149	99	99	76	23	5	1	4
Highlands	18,600	431	280	151	187	142	45	11	5	6
Hillsborough	355,500	8,451	6,785	1,666	3,320	2,737	583	226	149	77
Holmes	12,200	218	204	14	114	105	9	8	7	1
Indian River	19,500	558	343	215	210	166	44	21	9	12
Jackson	36,900	824	491	333	261	159	102	19	7	12
Jefferson	9,500	289	85	204	120	45	75	4	0	4
Lafayette	3,000	56	47	9	28	24	4	1	0	0
Lake	47,800	1,214	823	391	608	479	129	50	26	24
Lee	38,700	883	643	240	402	318	84	35	24	11
Leon	63,800	1,828	1,080	748	467	235	232	53	24	29
Levy	9,300	240	131	109	135	87	48	8	4	0
Liberty	2,600	83	69	14	17	14	3	3	3	0
Madison	15,200	367	153	214	152	73	79	14	5	9
Manatee	49,500	1,149	775	374	712	604	108	56	34	22
Marion	46,200	1,147	584	563	491	323	168	25	11	14
Martin	13,100	289	172	117	143	98	45	19	8	11
Monroe	41,800	1,279	1,138	141	276	234	42	32	28	4
Nassau	16,000	478	329	149	123	78	45	17	10	7
Okaloosa	53,000	1,878	1,728	150	265	242	23	48	40	8
Okeechobee	4,600	139	107	32	33	21	12	1	0	0
Orange	216,400	5,253	4,071	1,182	1,825	1,546	279	119	87	32
Osceola	15,400	248	196	52	266	231	35	11	8	3
Palm Beach	191,000	4,576	3,021	1,555	1,911	1,486	425	167	82	85
Pasco	31,100	585	457	128	346	314	32	29	17	12
Pinellas	268,100	4,432	3,436	996	4,363	4,047	316	150	86	64
Polk	178,700	4,189	3,077	1,112	1,525	1,223	302	139	77	62
Putnam	33,000	851	511	340	306	169	137	39	12	27
St. Johns	33,700	697	416	281	315	206	109	29	12	17
St. Lucie	30,500	901	453	448	289	185	104	40	15	25
Santa Rosa	23,100	798	717	81	180	153	27	22	21	1
Sarasota	52,800	1,136	898	238	695	629	66	28	18	10
Seminole	40,000	1,140	652	488	398	235	163	42	14	28
Sumter	11,400	264	147	117	107	78	29	7	2	5
Suwannee	14,700	335	194	141	171	111	60	16	8	8
Taylor	12,800	394	290	104	95	62	33	14	10	4
Union	7,900	98	58	40	51	36	15	2	1	1
Volusia	104,800	2,035	1,438	597	1,429	1,162	267	70	38	32
Wakulla	4,900	126	73	53	34	25	9	1	1	0
Walton	14,800	332	282	50	158	137	21	9	8	1
Washington	10,300	259	182	77	110	84	26	15	10	5

TABLE 10

PRELIMINARY TOTALS OF RESIDENT DEATHS FROM
CERTAIN CAUSES, BY COUNTY, FLORIDA, 1957

COUNTY	Maternal Deaths	Tuberculosis	Syphilis	Dysentery (All Forms)	Acute Polymyelitis	Malignant Neo- plasms (Cancer)	Diabetes	Anemias	Influenza & Pneumonia	Cardio-Vascular-Renal Diseases				Motor Vehicle Accidents	Other Accidents
										*Cerebral Vascular Disease	Heart Disease	Chronic Nephritis	All Other C.V.R. Disease		
STATE	62	260	121	11	6	6,065	505	94	1,264	4,777	14,269	383	1,358	1,087	1,561
Alachua	1	6	1	0	0	53	8	2	25	79	168	1	13	20	31
Baker	0	1	0	0	0	6	0	0	3	3	16	2	2	0	4
Bay	0	2	1	0	0	52	6	0	11	49	107	4	21	14	25
Bradford	0	2	0	0	0	11	1	0	8	20	45	1	3	5	4
Brevard	2	1	1	1	0	56	7	2	23	60	173	2	14	21	26
Broward	4	11	5	0	0	359	27	10	74	197	710	18	78	66	88
Calhoun	1	0	0	0	0	6	0	0	0	19	18	1	1	4	3
Charlotte	1	0	0	0	0	17	2	0	4	20	33	0	2	2	3
Citrus	0	0	0	0	0	10	0	0	0	12	42	1	1	3	5
Clay	1	0	0	0	0	12	1	0	10	16	35	0	6	7	3
Collier	0	0	0	0	0	12	0	0	4	10	25	3	3	6	3
Columbia	1	1	0	0	0	22	2	0	5	43	48	0	3	7	7
Dade	7	57	25	3	1	1,206	97	11	214	646	2,654	58	234	194	198
DeSoto	0	1	0	0	0	21	3	0	5	22	44	4	6	2	5
Dixie	0	0	0	0	0	7	1	0	5	10	11	1	2	2	7
Duval	2	44	20	1	0	531	35	12	115	437	1,047	38	139	83	151
Escambia	4	10	6	0	0	136	14	1	54	144	394	10	33	41	67
Flagler	2	0	0	0	0	8	2	0	1	9	9	1	3	0	8
Franklin	1	1	0	1	0	8	1	1	0	9	18	2	2	1	8
Gadsden	3	3	0	0	0	37	0	1	23	46	102	7	14	10	16
Gilchrist	0	0	0	0	0	1	0	0	0	3	10	0	0	2	1
Glades	0	0	0	0	0	1	0	0	0	3	10	1	1	0	1
Gulf	1	0	0	0	0	6	1	0	1	1	14	1	1	0	4
Hamilton	1	2	1	0	0	17	4	0	1	11	34	1	1	1	4
Hardee	0	1	1	0	0	16	4	0	7	10	39	1	8	3	6
Hendry	0	0	1	0	0	3	0	0	1	6	23	0	2	3	1
Hernando	0	1	1	0	0	17	2	0	5	14	27	2	4	4	13
Highlands	1	1	0	0	0	24	1	0	6	30	64	9	9	7	13
Hillsborough	4	20	14	0	0	518	39	10	71	299	1,266	35	86	70	116
Holmes	0	1	0	0	0	20	1	1	1	18	34	1	2	3	9
Indian River	1	2	1	1	0	25	5	2	3	22	68	2	9	13	7
Jackson	1	1	0	0	0	24	1	1	6	42	91	4	12	11	16
Jefferson	0	1	0	0	0	15	2	1	5	23	41	0	2	2	3
Lafayette	0	0	0	0	0	3	0	0	2	2	11	0	1	2	3
Lake	1	5	2	0	0	82	14	1	22	70	221	7	16	23	25
Lee	1	2	3	0	0	65	5	2	10	51	132	1	15	12	11
Leon	0	0	2	1	1	58	4	1	21	74	136	4	19	11	22
Levy	1	0	1	0	0	8	1	0	12	16	63	1	2	1	5
Liberty	0	0	0	0	0	2	0	0	0	0	5	1	3	3	10
Madison	0	0	0	0	0	24	4	0	7	16	52	1	3	8	19
Manatee	2	4	1	1	0	108	7	1	22	96	277	12	24	13	21
Marion	1	1	2	0	0	71	4	2	12	66	189	6	18	5	10
Martin	0	1	0	0	0	16	0	0	10	18	43	0	4	10	16
Monroe	0	2	0	0	0	54	4	0	8	38	76	1	4	4	5
Nassau	2	2	0	0	0	13	2	1	4	13	37	0	4	4	5
Okaloosa	0	2	0	0	0	23	1	0	14	27	7	1	0	18	32
Okeechobee	0	0	0	0	0	9	1	0	1	5	7	1	0	3	0
Orange	1	14	7	0	0	276	20	2	52	224	730	23	63	45	73
Osceola	0	0	0	0	0	24	4	3	8	37	118	2	6	4	5
Palm Beach	2	12	0	1	1	327	34	3	46	212	677	13	62	77	71
Pasco	0	1	1	0	0	46	6	0	7	50	122	1	16	9	27
Pinellas	3	13	7	0	1	756	46	7	92	654	1,824	23	175	55	101
Polk	2	8	7	0	0	225	23	1	59	220	531	11	34	46	66
Putnam	1	1	1	0	1	30	2	2	13	36	107	16	12	7	14
St. Johns	1	3	1	0	0	33	1	0	12	57	82	3	21	9	19
St. Lucie	2	1	1	0	0	42	3	0	10	36	81	1	6	16	3
Santa Rosa	0	2	0	0	0	21	1	0	9	22	69	4	3	7	3
Sarasota	0	3	3	0	0	132	9	2	20	70	266	5	24	11	35
Seminole	0	3	0	1	1	46	10	1	25	45	132	9	7	21	21
Sumter	0	0	0	0	0	14	1	1	6	20	40	2	6	5	4
Suwannee	0	1	1	0	0	15	2	2	13	34	52	2	8	5	4
Taylor	0	0	1	0	0	5	0	1	5	21	25	0	3	5	4
Union	2	1	0	0	0	6	0	1	3	5	15	1	2	4	1
Volusia	1	7	1	0	0	235	26	4	35	170	569	14	64	34	53
Wakulla	0	0	0	0	0	2	0	0	1	4	8	1	7	1	3
Walton	0	1	1	0	0	23	2	0	3	18	51	1	6	9	8
Washington	0	0	0	0	0	12	1	1	9	17	27	0	5	4	5

TABLE 11
PRELIMINARY TOTALS OF MARRIAGES BY COLOR,
DIVORCES, AND ANNULMENTS FOR FLORIDA, AND
EACH COUNTY, 1957

COUNTY	MARRIAGES			Divorces	Annulments
	Total	White	Nonwhite		
STATE	32,149	25,952	6,197	18,596	147
Alachua	417	278	139	171	2
Baker	37	24	13	360	2
Bay	444	334	110	176	3
Bradford	62	43	19	337	2
Brevard	469	369	100	586	3
Broward	2,035	1,539	496	873	6
Calhoun	26	20	6	56	
Charlotte	68	59	9	29	
Citrus	76	58	18	30	
Clay	79	65	14	59	
Collier	145	130	15	30	
Columbia	127	88	39	68	
Dade	7,933	6,859	1,074	4,593	56
DeSoto	90	71	19	29	
Dixie	22	17	5	28	
Duval	2,048	1,605	443	797	4
Escambia	962	785	177	768	16
Flagler	51	30	21	237	2
Franklin	41	34	7	16	1
Gadsden	147	52	95	54	2
Gilchrist	39	30	9	6	
Glades	15	6	9	4	
Gulf	78	45	33	27	
Hamilton	36	23	13	34	1
Hardee	137	123	14	225	2
Hendry	123	99	24	40	
Hernando	108	82	26	34	
Highlands	185	113	72	102	
Hillsborough	2,887	2,437	450	1,423	8
Holmes	78	72	6	67	
Indian River	186	137	49	27	
Jackson	159	105	54	80	1
Jefferson	61	20	41	14	
Lafayette	16	16		2	
Lake	392	291	101	661	2
Lee	344	274	70	170	
Leon	333	226	107	257	1
Levy	69	44	25	15	
Liberty	12	11	1	13	
Madison	59	39	20	35	
Manatee	441	359	82	106	
Marion	313	198	115	137	2
Martin	138	103	35	10	
Monroe	470	409	61	263	
Nassau	59	49	10	14	
Okaloosa	293	273	20	180	1
Okeechobee	52	44	8	14	
Orange	1,545	1,240	305	340	1
Osceola	183	128	55	21	
Palm Beach	1,586	1,211	375	703	
Pasco	288	250	38	121	1
Pinellas	2,013	1,760	253	865	6
Polk	1,425	1,141	284	773	8
Putnam	189	133	56	347	
St. Johns	182	138	44	650	6
St. Lucie	304	195	109	110	
Santa Rosa	128	116	12	72	
Sarasota	520	450	70	202	1
Seminole	271	175	96	153	
Sumter	106	80	26	124	2
Suwannee	98	80	18	52	
Taylor	63	52	11	29	
Union	30	24	6	281	
Volusia	689	562	127	440	5
Wakulla	37	22	15		
Walton	64	57	7	45	
Washington	66	50	16	11	

TABLE 12
VITAL STATISTICS SCOREBOARD
BASED ON PROMPTNESS AND COMPLETENESS OF
CERTIFICATES FILED IN 1957

COUNTY	Rank	Percent of Certificates Filed on Time		Percent of Complete Certificates		Percent of Monthly Reports Submitted on Time	Change from 1956 Total Score	Total Score (Maximum =500)
		Births	Deaths	Births	Deaths			
Baker	1	100	100	100	100	100	500	+ 6
Sarasota	2	99	99	99	99	100	496	- 1
Orange	3	99	99	99	99	100	496	+ 1
Jefferson	4	98	100	98	100	100	496	+13
Martin	5	99	96	100	100	100	495	+ 6
Hardee	6	99	98	99	99	100	495	+18
Citrus	7	94	100	100	100	100	494	+10
Okeechobee	8	97	97	99	99	100	493	+ 1
Dade	9	97	97	99	99	100	492	+ 2
Pinellas	10	95	99	99	99	100	492	+17
Volusia	11	96	97	99	99	100	491	0
Seminole	12	95	99	99	98	100	491	+22
Holmes	13	98	93	100	100	100	491	+26
Wakulla	14	100	95	100	95	100	490	-10
St. Lucie	15	97	95	99	99	100	490	+10
Hillsborough	16	92	99	100	99	100	490	- 5
Hernando	17	97	94	99	99	100	489	- 4
Escambia	18	92	98	99	99	100	488	- 1
Suwannee	19	95	96	99	97	100	487	+23
Franklin	20	92	98	100	95	100	485	+ 2
Monroe	21	90	98	99	98	100	485	+ 3
Broward	22	92	97	98	98	100	485	+ 7
Gilchrist	23	92	91	100	100	100	483	+ 5
Polk	24	88	96	99	99	100	482	- 2
Levy	25	91	91	100	100	100	482	+13
Osceola	26	87	98	99	98	100	482	+34
Gulf	27	93	92	98	98	100	481	+ 9
Washington	28	89	94	98	100	100	481	+19
Hamilton	29	92	91	97	99	100	479	+54
Flagler	30	96	92	100	98	92	478	+38
STATE		89	95	99	99	94	476	+ 4
Walton	31	95	85	99	97	100	476	+18
Charlotte	32	96	100	99	97	83	475	- 5
Madison	33	84	99	95	96	100	474	+ 3
Putnam	34	92	89	98	95	100	474	+10
Leon	35	86	91	99	98	100	474	+18
Santa Rosa	36	91	83	99	99	100	472	+19
Palm Beach	37	76	97	99	99	100	471	+ 6
Clay	38	82	93	98	98	100	471	+17
Marion	39	78	94	99	99	100	470	- 4
Duval	40	84	98	98	98	92	470	+ 1
St. Johns	41	94	95	99	99	83	470	+ 7
Calhoun	42	92	88	100	98	92	470	+16
Nassau	43	94	96	100	96	83	469	+ 4
Gadsden	44	83	88	99	98	100	468	- 3
Lake	45	90	81	99	98	100	468	+12
Bay	46	81	86	99	98	100	464	-13
Highlands	47	79	95	100	98	92	464	+ 7
Manatee	48	91	98	99	99	75	462	+ 7
Union	49	89	84	97	100	92	462	+13
Alachua	50	79	91	99	99	92	460	+ 2
Glades	51	80	87	100	93	100	460	+60
Taylor	52	72	96	93	97	100	458	+23
Brevard	53	80	86	99	99	92	456	- 1
Pasco	54	83	94	97	99	83	456	+26
Liberty	55	100	80	100	100	75	455	- 3
DeSoto	56	85	96	99	99	75	454	+ 4
Lee	57	62	94	99	98	100	453	- 4
Bradford	58	99	97	99	98	58	451	0
Dixie	59	53	91	99	100	100	443	-10
Sumter	60	73	71	100	98	100	442	- 1
Indian River	61	93	100	99	99	50	441	-32
Hendry	62	49	95	99	98	92	433	- 6
Okaloosa	63	58	85	99	98	75	432	+19
Columbia	64	71	79	100	98	75	423	+64
Jackson	65	71	70	98	99	83	421	-24
Collier	66	59	91	98	98	67	413	-53
Lafayette	67	32	93	95	100	58	378	-68

BUREAU OF MATERNAL AND CHILD HEALTH

R. W. McCOMAS, M.D., M.P.H., Director
 E. L. FLEMMING, Ed.D., Acting Director
 S. D. DOFF, M.D., M.P.H., Medical Consultant
 EARL LOMON KOOS, Ph.D., Social Scientist

During 1957 this bureau has had several staff changes. Dr. McComas served until mid-summer at which time he left the State Board of Health. Dr. Flemming, the Consultant on Child Growth and Development, was named acting director of the bureau and at the end of the year continued in that position. A medical consultant was added to the staff in October and the part-time health educator has continued to increase her responsibilities. A vacancy still remains for a second physician on the staff.

Considerable time and effort were expended in developing a special research project on mental retardation, but this had not received approval from the sponsoring agency, the U. S. Children's Bureau, at the time the year ended.

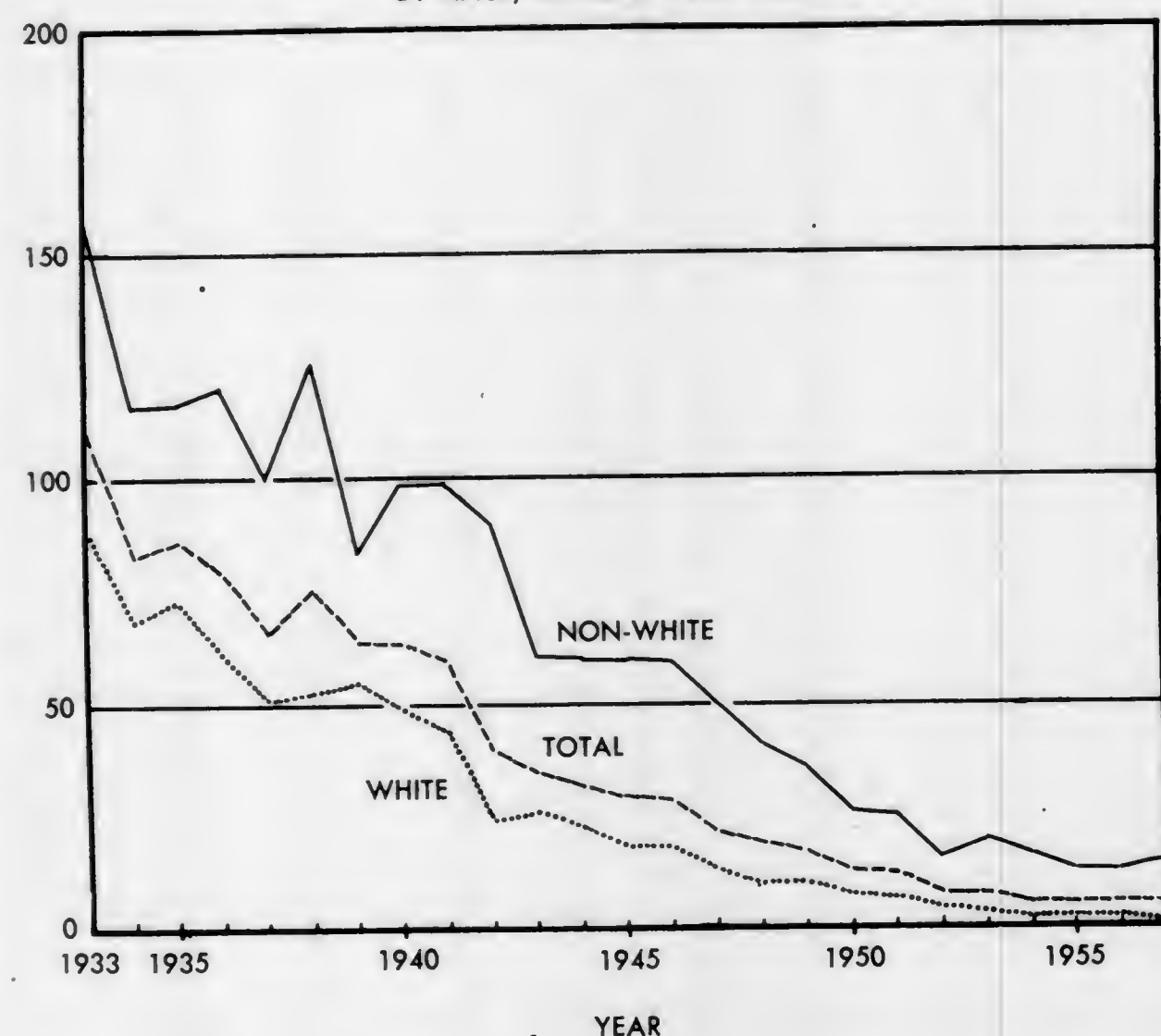
MATERNAL HEALTH

Provisional figures indicate a decrease in the maternal death rate from 6.4 per 10,000 live births in 1956 to 6.0 in 1957, continuing the

FIGURE 1

RESIDENT MATERNAL DEATH RATES (PER 10,000 LIVE BIRTHS)

BY RACE, FLORIDA. 1933 - 1957.



downward trend noted for some years. There were 62 deaths associated with pregnancy, childbirth, and the puerperium in 1957 of which 17 were white and 45 nonwhite. The white rate was 2.3 per 10,000 live births and the nonwhite 15.5.

Although this bureau is jointly responsible for the supervision of the midwife program with the Division of Public Health Nursing, the report of the program will be found in this volume under the latter. Briefly, the number of midwives licensed during the year continues to decrease with a total of 283 for 1957 as compared with 299 during the previous year. Nine new midwives were licensed in areas of determined need and an equal number were retired during the year.

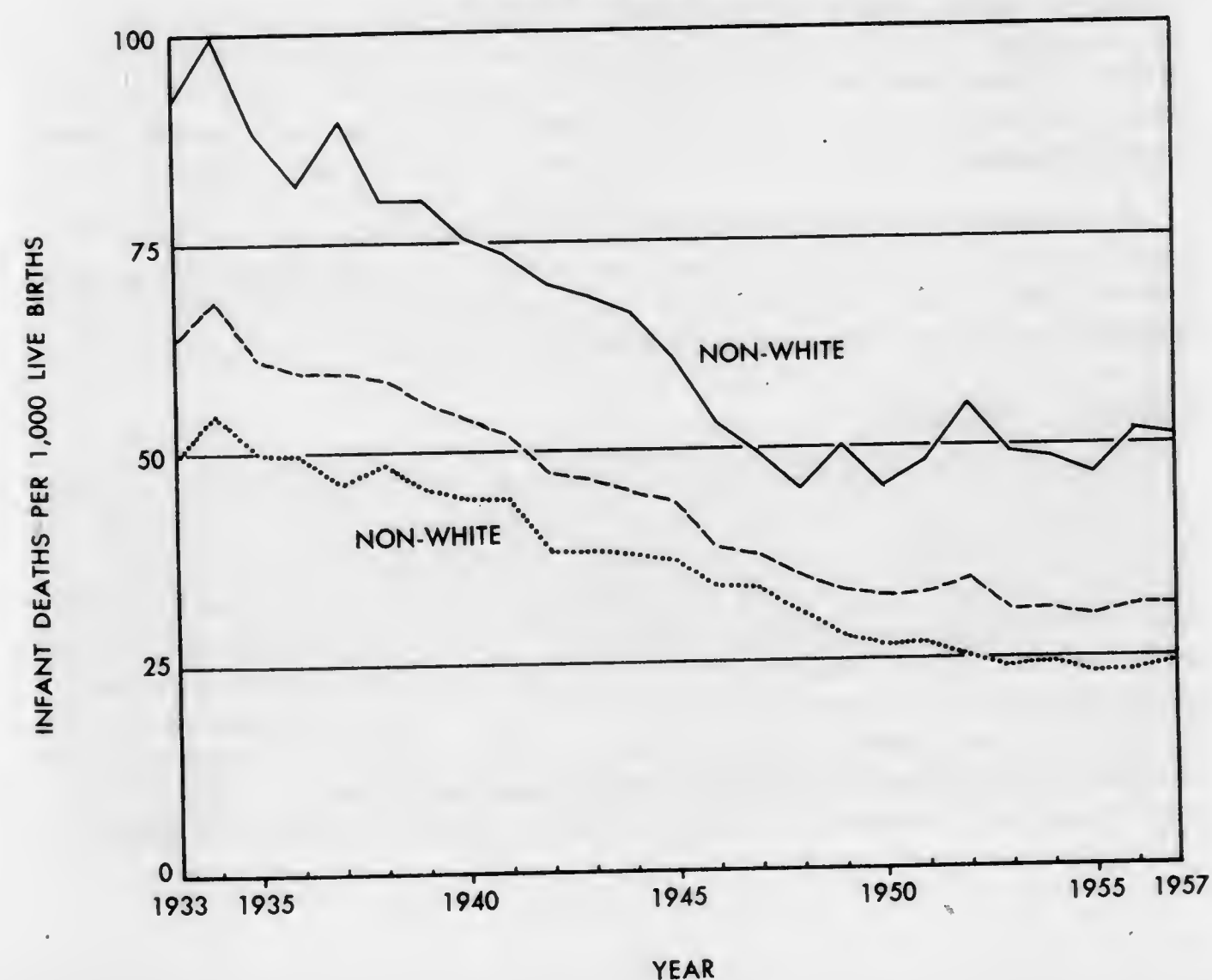
Continued emphasis has been placed upon the development of low cost maternity plans through private physicians and some progress has been made in the utilization of funds for the medically indigent to care for abnormal obstetrical cases.

For the seventh consecutive year an *Obstetric and Pediatric Seminar* for physicians and nurses was held in Daytona Beach. Alabama has now become associated with Florida, Georgia and South Carolina. This meeting is now called the Postgraduate Obstetric-Pediatric Seminar and is sponsored by the Bureaus of Maternal and Child Health of the four

FIGURE 2

RESIDENT INFANT DEATH RATES (PER 1,000 LIVE BIRTHS)

BY RACE, FLORIDA. 1933 - 1957.



State Health Departments and the Maternal Welfare Committees of the four State Medical Associations. The program, which featured nationally known authorities in obstetrics and pediatrics, was enthusiastically received. Attendance at this seminar has shown a consistent increase with a total of 401 persons attending the 1957 meeting. A breakdown by state and category shows: Florida 271, Georgia 75, South Carolina 25, Alabama 20, other states 10; physicians 278, nurses 118, others 5.

CHILD HEALTH

In 1957 there were 3312 infant deaths compared with 3090 in 1956. The increase is chiefly a reflection of the increased number of births in the state; the provisional 1957 rate of 31.8 per 1,000 live births was identical to the final 1957 rate. The white rate in 1956 was 24.4 per 1000 live births and the non-white 51.0. There were 1834 white infant deaths and 1478 nonwhite.

The special project for care of *premature infants* at the Premature Demonstration Center, Jackson Memorial Hospital, Miami continued under a special grant from the U. S. Children's Bureau. The annual report of the Center is not available at this time, but our records indicate that 268 premature infants from Southeast Florida were cared for under this program.

A number of standard and specialized incubators were distributed to various county health departments to provide better service for premature infants. This equipment was placed in local hospitals on indefinite loan from the local health departments.

It has been possible to maintain the four positions established in 1956 for increased service to *retarded children* in selected child guidance clinics. These positions are supported through special Children's Bureau funds and are located in Escambia, Orange, Sarasota-Manatee and Palm Beach Counties.

A series of workshops on *Child Growth and Development* have been held in nearly all counties in the state. They have focused on the normal growth process and reports from both parents and professional persons suggest that these experiences do much to facilitate a healthy home life.

SCHOOL HEALTH

Cooperatively with the State Department of Education and a group of voluntary health agencies, the bureau carried forward a program of in-service training for school health coordinators. Dr. George T. Stafford, Professor of Health and Physical Education, University of Illinois, was brought to Florida to conduct clinics within easy access of each school in the state. During 1957 school and health departments pooled their efforts in arranging these clinics during which school health coordinators in every county were oriented to the duties and responsibilities of their newly created positions. To evaluate the effort and plan for the next steps in developing Florida's School Health Program, a group of

approximately 100 outstanding health and education leaders of the state met June 13-14 at the University of Florida. The proceedings of this conference were compiled and published in a booklet "Action with Purpose", with assistance from this bureau. It is being widely distributed to serve as a guide to future plans and programs.

To assist in carrying forward in Florida the national program of Fitness and Youth, representatives of the bureau met in conference with members of the State Department of Education, Florida Medical Association and other health and civic groups. Out of these conferences grew a blueprint for a Council on Health and Fitness for Florida's Youth.

Special equipment in the form of audiometers and illuminated Snellen charts has been distributed to county health departments for use in their school health programs.

HEALTH SERVICES FOR MIGRATORY AGRICULTURAL WORKERS

The special project of the Children's Bureau on migrant workers in Palm Beach and Collier Counties has become an operational entity. It is now fully staffed with six public health nurses, a medical social worker, nutritionist, health educator, liaison worker, sanitarian, two clerks, and part-time medical consultants. Comprehensive health services are being offered to the migrants while the team engages in its action research.

The Legislature made available some \$20,000 on the recommendation of the Governor's Advisory Committee on Migrant Labor. These funds were used to employ a nurse in Dade County, a sanitarian in Palm Beach County, two nurses in Collier County, and part-time physicians in Dade, Broward and Collier Counties. All of these persons are employed for direct health services to migrants.

OTHER ACTIVITIES

Bureau staff members have made many talks to lay and professional groups. The television series on Child Growth and Development has been continued. The acting director was elected to the National Education Committee of the National Association for Mental Health. Pamphlets on mental retardation were made available for distribution to the Florida Council for Retarded Children. A staff member was temporarily assigned the task of developing a new format for employee orientation programs. The first session under the revised plan was tried on an experimental basis before the close of the year.

Booklet by staff member:

Koos, E. L. They Follow the Sun. Florida State Board of Health. 1957.

BUREAU OF PREVENTABLE DISEASES

C. M. SHARP, M.D., Director

JAMES O. BOND, M.D., Epidemiologist

For the first time in several years, a communicable disease other than poliomyelitis received the major attention of the staff of the Epidemiology Office. More *influenza* cases were reported to the State Board of Health by private physicians and county health officers than any other single communicable disease. This was in large part due to the widely heralded epidemic of Asian influenza which swept over most of the United States. Florida was one of the first states to have laboratory confirmed cases of this disease in July 1957. Prior to this a statewide alert had been set up, with special laboratory facilities made available to all private physicians and hospitals in the state.

The first cases to enter the state apparently were students returning from a conference at Grinnell, Iowa, in June. In July, cases in Chilean airlines personnel landing in Miami were confirmed as Asian influenza by the Virus Diagnostic Laboratory, Variety Children's Hospital, Miami. They obtained the first actual isolates of virus typed as antigenically similar to the A/Japan/305/57 prototype. During the month of August, there were several scattered outbreaks in colored communities, throughout the state. The largest one occurred in St. Petersburg, and was investigated thoroughly as the first community wide outbreak in Florida. The results were reassuring, in that the incidence of complications was remarkably low, although over 3000 cases occurred in a community of 16,000 individuals. Attack rates were 18.7 per cent for the total population, and within the population female rates were higher than male and the highest rates by age were in the 5-14 group. There was no indication that infants or the elderly were attacked any more frequently, although once taken ill, the elderly had a more severe course.

After the opening of schools in September, the epidemic rapidly gained momentum, following a pattern of spread from colored schools to white high schools to white elementary schools to the remainder of the community. The peak of reported cases occurred during the second week of November, and considering the normal 10-14 day lag from the occurrence of a case to its final report arriving in Jacksonville, the actual peak of cases probably occurred in the last week of October. A total of 16,358 cases was actually reported by December 31. This probably represents 50 per cent of the total cases occurring in the state, which means approximately 10 per cent of the total population was affected. The general impression that the epidemic was not as severe in Florida as elsewhere was confirmed by a study of total deaths reported for September, October, November and December. The total recorded deaths were not in excess of the numbers expected, based on the trend for the past five years for each of the months. This finding

contrasted with national figures where a definite excess of deaths for the epidemic months was demonstrated.

The epidemiology office assisted in obtaining laboratory specimens in suspected outbreaks of influenza, and in maintaining a surveillance of the occurrence by laboratory confirmed cases. Such cases occurred in 26 different counties for Asian influenza (A/Japan/305/57) and 17 different counties for A/Denver/57 influenza, a closely related strain.

Twenty-nine isolations of a virus typed as A/Japan were made by the Virus Diagnostic Laboratory of the State Board of Health. One isolation of a strain typed as A/Den/57 was made and one strain isolated was provisionally described as Florida A, since it was not identical to either the A/Japan or Denver strains. Although 80-90 per cent of individual sera tested showed evidence of past infection with a B strain of influenza virus (B/GL/54) only one individual gave evidence of recent infection on examination of paired sera, and only one isolation of B strain virus was made in the state. The laboratory studies therefore served to detect the introduction of Influenza A into Florida and confirmed it as the etiologic agent responsible for most of the local outbreaks.

In contrast to the major efforts toward diagnosis and epidemiologic surveillance, minor efforts were directed toward control measures. This was due in large part to the opinion of the State Board of Health that the only available preventive measure, namely vaccination, would arrive too late and in too small a quantity to have an appreciable effect on the course of the epidemic, and that the predicted severity of the epidemic, both for the individual and community, was insufficient to warrant heroic measures. Fortunately, both of these preliminary surmises were confirmed by the course of events. Immunizations were recommended for persons responsible for the care of the sick, maintenance of essential community functions, and persons with chronic cardio-respiratory diseases. Personnel at the State Board of Health were offered influenza vaccination in line with these recommendations and a study made of their reaction rates. The results of this study are shown in Table 13.

The educational efforts consisted primarily of keeping professional, medical and public health personnel informed of the course of the epidemic, the status of the vaccine, and nuances of laboratory diagnosis. Public information programs were directed toward relieving anxiety with facts, promoting good nutrition, better home nursing, and keeping the schools open. The widespread distribution of the influenza virus was rivaled only by the magnitude of the distribution of newsprint concerning it.

POLIOMYELITIS

Reported cases of poliomyelitis continued their dramatic fall, which began in 1955. One hundred thirty-four cases were reported in 1957, compared to 364 in 1956, and 466 in 1955. Paralytic rates dropped 63 per cent from the preceding year (2.7/100,000 to 0.95). That this drop in reported cases is not entirely due to the widespread use of Salk vaccine is evidenced by the equally dramatic decrease in numbers of non-paralytic cases whose occurrence the Salk vaccine theoretically does not influence.

The federal program to provide Salk vaccine to the states terminated on July 1, 1957, and Florida resumed the purchase and distribution of the vaccine. At that time, records kept during the federal program allowed fairly accurate estimates to be made of the size of the immunized population. For June 1957 these estimates were that for the population under twenty, 39 per cent had had a full course of 3 injections, and 83 per cent had at least one injection. The age group 5-9 had the best protection with 60 per cent having completed the course. Only 10 per cent of the teen agers had completed the course, and only two per cent of the young adults aged 20-39. Thus, there is still an ample reservoir of unimmunized persons in Florida in whom an epidemic of poliomyelitis could occur.

Special surveillance for safety and effectiveness of the Salk vaccine was maintained in conjunction with the Virus Diagnostic Laboratory. Table 14 shows the vaccination status of reported cases of polio, and Table 15 the laboratory results on those vaccinated cases which were tested for evidence of infection. These tables are somewhat biased, in that special efforts were made to obtain reports and laboratory specimens on all cases and suspect cases occurring in triply vaccinated individuals. Persons who had one or two injections were given special attention only if onset of their disease was within 30 days of the last injection. Unvaccinated persons were not given special attention for laboratory confirmation of the clinical diagnosis. It is seen from these tables that approximately one-third of the total paralytic cases were reported to have occurred in vaccinated individuals. However, seven of the nine reported cases of paralytic polio occurring in the triply vaccinated individuals were subjected to laboratory investigation, and only two gave evidence of recent infection with polio virus. Of the total of 38 vaccinated cases tested, only 12 were confirmed as polio by the laboratory. There is, of course, some error in the laboratory diagnosis of polio, but this largely represents the alertness of private physicians in reporting for surveillance any case remotely resembling polio in whom previous Salk vaccine injections had been given.

FOOD-BORNE OUTBREAKS

An attempt was made to obtain and stimulate better investigation and reporting of outbreaks of food-borne disease. Three major such

events occurred. One in Jacksonville involved 120 persons eating lunch aboard a ship in the harbor. The cause was traced to enterotoxin producing staphylococci contaminating salads and meats served at the meal. A second major outbreak involved employees and staff of a large Miami hospital. Over 50 persons were infected with a *Shigella* organism traced to a turkey salad prepared by a food handler with these organisms. In Tampa, over 40 cases of severe vomiting and diarrhea were observed in individuals eating pre-packaged Cuban sandwiches. One person with a pre-existing disease died as a result. The cause was traced reasonably accurately to whole hams used as source meats, which were contaminated with enterotoxin producing staphylococci.

In order to stimulate better reporting and investigations of food-borne outbreaks, a sample kit for carrying out such investigations was prepared and distributed to the counties. This was done in cooperation with the Bureaus of Laboratories, Sanitary Engineering and Local Health Service.

ROUTINE MORBIDITY SURVEILLANCE

Tetanus remains a major cause of death from communicable diseases, and Florida leads the nation in rates for both total and neonatal deaths. Preliminary data indicate 29 deaths and 64 cases occurred in 1957. The problem is largely one of the non-white population (10-1 ratio for deaths) and in the southeast coastal counties. Special plans to step up tetanus immunization of pre-natal cases and other adults are underway.

Salmonella infection reports continued to rise. This can only partially be attributed to efforts to have all cases diagnosed by state laboratories included in the reports, since this was carried out in 1956 also. The laboratory reports indicate the most frequently found types are, in order, *Salmonella typhimurium*, *S. montevideo*, *S. oranienburg*, *S. newport*, *S. muenchen* and *S. berta*. The level of reported cases of typhoid fever remained the same in 1957, as it has over the past several years (Table 18). Efforts to have all new cases and carriers phage typed were continued, and this aided in the solution of one epidemiologic puzzle in Dade county.

Reported *diphtheria* cases showed a comfortable reduction in 1957 (Table 18). Duval county, and more particularly the colored sections of Jacksonville, continued to lead the state in occurrence of cases. An outbreak in this area involving 12 children out of approximately 40 attending a day nursery was investigated. It was found that approximately 50 per cent of the children had a natural immunity, and all were under six years of age. This corresponded with the almost total lack of evidence of clinical diphtheria in children with positive cultures. It was concluded that there is a reservoir of endemic diphtheria in the area, resulting in a sizable degree of natural immunity. It is of further interest that practically all of the diphtheria organisms typed during 1957 were in the mitis group.

Arthropod borne diseases were distinguished again by their relative absence compared to a decade ago. Of the 14 reported malaria cases, none that were confirmed by smear were acquired in Florida. Of the five typhus cases, three were part of an outbreak in Miami related to a fire in a feed warehouse which presumably drove the rats into the surrounding area. Despite a sizable epidemic of Eastern Equine Encephalitis in the horse population of the state, only two laboratory confirmed cases occurred in humans. One enigmatic isolation of Saint Louis Encephalitis virus was made from the spinal fluid of a transient in Hillsborough county.

Infectious hepatitis case reports experienced a slight rise, the first in two years. An attempt to relate this to the large number of polio inoculations given with multiple dose syringes failed to incriminate this potential source. A controlled study of the efficacy of mass gamma globulin prophylaxis, using different dosages, was carried out at the Sunland Training Center in Gainesville. Final reports are not available pending the 12 month follow-up.

Streptococcal and meningococcal infections showed substantial increases which are thought to be related both to better reporting and the occurrence of the influenza epidemic.

SPECIAL STUDIES

During 1957 a special epidemiologic study of patients with a typical acid-fast bacilli resembling *M. tuberculosis* was undertaken. Forty-seven individual interviews were obtained, most of whom were with patients hospitalized in Florida Tuberculosis Hospitals. From these the following preliminary conclusions were made. These infections were selective for older white males in the hospital population. There were significantly few such cases found among colored patients. There was suggestive evidence that a particular variety termed the non-photochrome has a regional concentration in the Southeastern United States, and in Florida, more cases appeared to occur in the central portion of the state. This, however, might be wholly or in part explained by the increased diagnostic facilities and alertness in tuberculosis hospitals in these areas. There was no evidence of contact spread of these infections. There was little or no evidence that these organisms were the result of previous chemotherapy in the patients themselves or in tuberculous contacts. One significant cluster of four cases occurred in the small rural community of Bowling Green. These patients gave no history of personal contact prior to isolation of their organisms. These studies are continuing on the 100-odd patients so far identified as having these organisms.

Use of tuberculin testing as an epidemiologic tool was the subject of special study during the year. A Tuberculin Testing Guide was prepared and distributed to each county health department. Assistance was given to pilot surveys conducted in Palm Beach, Duval and Escambia county schools. A special tuberculin and histoplasmin skin test survey on 2000 prisoners admitted to the Raiford State Prison

during the year was carried out under the supervision of the epidemiologist. Such a testing program will gain wider usefulness as the incidence of tuberculosis steadily falls.

The growing problem of *staphylococcal infections* in hospital newborn nurseries received preliminary attention. Assistance was given to the laboratory in a special study conducted at a large hospital in Jacksonville. All mothers and their infants admitted during a seven-day period were cultured on admission and discharge for the presence of staphylococci. Phage typing and antibiotic sensitivity patterns were used in an attempt to trace the course of these infections. A six-week follow-up after hospital discharge was also carried out. One baby developed pustular dermatitis during hospitalization, and seven during the six-week follow-up. Seventy-four babies were included in the study. Similar outbreaks in another Jacksonville hospital and in a foundling nursery were investigated, but less extensively so. These studies, it is hoped, will furnish the information for an effective program to report, investigate and control these occurrences.

The special research project studying the causes of the increasingly unfavorable male mortality rates in relation to female rates was continued. Most of the work was performed by a special research assistant, Miss Doris Hurnie, who prepared the following summary:

The *Fragile Male Project*, designed to study the widening gap between male and female death rates, is engaged in a survey of mothers of heterosexual twins as to their child raising attitudes. In the past year, a total of 78 mothers of twins, born between 1940-51, were interviewed. This included six non-whites, later excluded from the Project.

The interview form of 150 items contained questions relating to the twins' personal record of accident-illness and maternal attitudes on accident-illness, expectation and repression-expression. Responses were analyzed statistically to determine if a significant sex difference was present.

Twelve sets of twins, born in 1940-42, were obtained by contacting officials in Duval county junior and senior high schools. Because of the small number, those sets born outside the county, regardless of length of residence locally were included. Sixty sets, born in 1943-51, were obtained from Duval county birth certificates.

Original subjects of the study were 30 mothers of five, six and seven year olds, born in 1949-51. Results from this age group were used as bases for comparison with the other age levels. Next, the 12 mothers of the 14, 15 and 16 year olds were questioned. Finally, 28 mothers of the 8 through 13 year olds, born 1943-48, were interviewed. In the latter study each mother was asked to examine also 30 stick figure drawings and to indicate which of her twins was represented by the drawing on the card. The 30 cards were prepared to correspond with 30 items in the questionnaire. Analysis of answers on cards and corresponding questions was made.

A plan to interview fathers as well as mothers of twins to obtain cross attitudes of each parent on child rearing was discontinued and replaced by a new study to question 80 year old women and young twin mothers on their ideals and child training practices evolved from these ideals.

A number of consultants from statistical, sociological and psychological fields have conferred with The Fragile Male Committee. In addition, a bibliography is being prepared and presently contains nearly 300 references.

A tabulation of the preliminary findings in 1957 is given in Table 16.

* * * * *

Finally, the special project concerned with the epidemiology of *accidental poisoning* was continued. A total of 1315 reports have been processed by the epidemiology staff since the inception of the program in July 1956. A summary of the 736 cases reported for the year July 1956 — July 1957 is given in Table 17. A significant result of the activities of this program in 1957 was the discovery of several cases of poisoning due to a thallium containing insecticide which probably would have gone unnoticed, due to their dispersal over the state. The program also furnished statistical facts for the continuing program of public education in the prevention of accidental poisoning in children.

Article by staff member:

Bond, J.O. The Fragile Male, *Geriatrics* 12:489-493, Aug. 1957.

TABLE 13

REACTIONS TO INFLUENZA VACCINE, BY SEX —
MONOVALENT ASIAN STRAIN, 200 cca/cc — DOSE 1cc
SUB-CUTANEOUS OR INTRAMUSCULAR — 162 ADULT
EMPLOYEES — FLORIDA STATE BOARD OF HEALTH,
SEPTEMBER 1957

	MALES		FEMALES		TOTAL	
	No.	%	No.	%	No.	%
Fever	2	3.2	17	15.8	19	11.8
Chills	2	3.2	11	10.2	13	8.0
Aching, Headache, etc.	6	11.0	23	21.4	29	17.8
Drowsiness or Gen. Malaise ..	8	14.8	19	18.6	27	16.6
Hives	1	1.8	3	2.8	4	2.4
Local reactions (redness, pain, swelling) ..	23	42.5	61	56.5	84	51.5
No reactions	23	42.5	33	30.5	56	34.5
Total	54	100.0	108	100.0	162	100.0

TABLE 14
REPORTED CASES OF POLIOMYELITIS BY
VACCINATION STATUS, FLORIDA, 1957

No. of Injections	Paralytic Status (Initial Report)			All
	Paralytic	Non-Paralytic	Unspecified	
Unknown		3		3
One		3	2	5
Two	4	10	3	17
Three	9	10	2	21
All Vaccinated	13	26	7	46
Others*	26	31	31	88
Total	39	57	38	134

* No statement was received with morbidity card indicating presence of vaccination, therefore, individual was assumed to be non-vaccinated.

TABLE 15
RESULTS OF LABORATORY INVESTIGATION OF REPORTED
CASES OF POLIO OCCURRING IN VACCINATED
CHILDREN, FLORIDA 1957

No. of Injections	Paralytic		Non-Paralytic		Unspecified		All	
	Tested	Confirmed	Tested	Confirmed	Tested	Confirmed	Tested	Confirmed
Unknown			3	2			3	2
One			2	1	2	0	4	1
Two	1	0	9	2	3	1	13	3
Three	7	2	9	3	2	1	18	6
Total	8	2	23	8	7	2	38	12

TABLE 16
NUMBER AND PERCENT OF MALE AND FEMALE
RESPONSES TO QUESTIONNAIRE BY 72 WHITE MOTHERS,
BY AGE GROUP, OF THEIR TWINS

Category:	AGE GROUP AND SEX OF TWINS					
	5 - 7		8 - 13		14 - 16	
	Male	Female	Male	Female	Male	Female
Fact:	Number					
Accident-Illness	263	184	236	94	82	67
Attitude of Mother:						
Behavior Expected	198	226	220	187	91	105
Repression and						
Expression	137	88	159	153	49	45
Accident-Illness	182	127	157	39	68	50
Fact:	Percent					
Accident-Illness	58.8	41.2	71.5	28.5	55.0	45.0
Attitude of Mother:						
Behavior Expected	46.7	53.3	54.1	45.9	46.4	53.6
Repression and						
Expression	60.9	39.1	51.0	49.0	52.1	47.9
Accident-Illness	58.9	41.1	80.1	19.9	57.6	42.4

TABLE 17

736 REPORTED CASES OF ACCIDENTAL POISONING
7/1/56 to 7/1/57

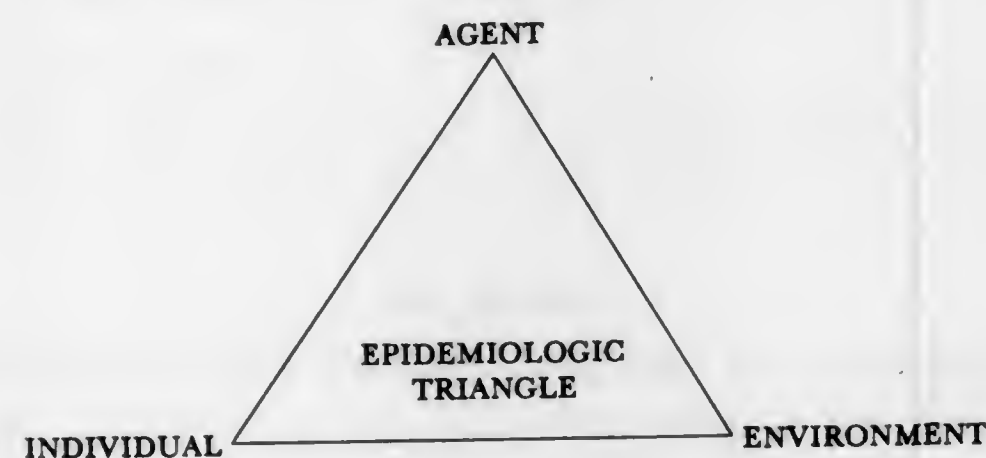
15 FLORIDA POISON CONTROL CENTERS

Florida Pediatric Society — Florida State Board of Health
 Florida Chapter American 15 County Health Departments
 Academy of Pediatrics

SUBSTANCES INGESTED

Internal Medicines 307	External Medication 38	Petroleum Products 113
Including:	Including:	Including:
Aspirin 129	Iodine 12	Kerosene 87
Barbiturates 56	Alcohol 7	Gasoline 12
Other sedatives	Camphor 7	Other 14
and relaxants 32	Other 12	
Laxatives 11		
Other 79		

Insecticides Rodenticides . . 105	Miscellaneous 173
Including:	Including:
Roach Poison 42	Cleaning Agent 81
Rat Poison 12	Turpentine 13
Ant Poison 11	Toad Stool 9
Parathion, Chlordane,	Tung Nut 6
DDT 7	Cosmetics 5
Other 33	Other 59



White Males 289	No. Reported by Each Center	
White Females 304	Miami 189	W. Palm Beach 18
Colored Males 59	Jacksonville 166	Ft. Myers 17
Colored Females 52	Pensacola 79	Ocala 18
Unknown 32	Gainesville 68	Lakeland 13
Total 736	Tampa 52	Orlando 5
Age 0-4 530	Sarasota 37	Daytona 2
5-9 33	Panama City 36	Tallahassee 0
10-14 5	Ft. Lauderdale 32	Unknown 4
15-19 13	Room Where Substance Found (214 cases)	
20+ 127	Kitchen 77	Living Room 24
Unknown 28	Bedroom 63	Porch 10
Total 736	Bathroom 27	Garage 7
Intent	Dining Room 6	
Accidental 575	Person Watching Child (280 cases)	
Suicide 73	Mother 227	Maid/sitter 5
Overdose 60	Grandparents 28	Friend 5
Unknown 28	Older Sibling 11	Father 4
	Warning Label on Container (262 cases)	
	Yes 111	No. 151

TABLE 18

CASES OF CERTAIN REPORTABLE DISEASES, FLORIDA,
1947 - 1957

DISEASE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Anthrax	0	0	0	0	5	0	1	0	0	0	0
Brucellosis	67	74	86	36	10	10	10	9	12	12	17
Cancer	1,025	1,880	4,394	5,090	5,057	5,333	5,717	5,640	5,852	6,591	4,599
Chancroid	745	388	343	248	317	462	328	344	388	273	186
Dengue Fever	0	1	0	0	1	0	2	0	0	0	0
Diarrhea of Newborn	67	191	134	113	60	143	96	106	158	288	200
Diphtheria	283	327	206	97	66	82	114	114	99	102	87
Dysentery, Amebic	59	153	135	113	88	161	177	102	144	139	180
Dysentery, Bacillary	16*	219*	77	50	47	235	53	48	68	83	79
Encephalitis, Viral	4	5	10	9	17	12	9	13	19	15	22
German Measles	64	56	43	45	214	304	305	126	190	205	84
Gonorrhea	20,160	18,820	15,388	14,185	12,709	11,809	11,459	11,841	12,146	10,991	9,725
Granuloma Inguinale	271	773	827	446	417	233	109	71	69	73	66
Hansen's Disease	2	11	0	3	2	2	1	2	2	2	0
Hepatitis, Infectious	24	66	4	27	46	236	301	303	262	152	198
Hookworm	4,605	5,008	6,636	10,051	6,561	6,611	4,206	4,772	3,551	2,659	2,197
Influenza	1,083	366	258	235	584	218	1,406	279	157	219	16,358
Leptospirosis	0	0	0	1	1	0	1	1	1	0	2
Lymphopathia Venerea	216	197	127	34	40	120	96	55	51	55	58
Malaria	135	111	43	7	23	50	19	11	13	11	14
Measles	1,315	4,802	3,753	2,499	2,431	4,072	1,316	10,766	1,495	5,186	6,149
Meningococcal Infections	49	48	41	53	92	88	102	96	88	69	75
Mumps	914	1,329	1,791	1,432	2,101	1,985	1,112	1,516	1,933	4,353	2,112
Ophthalmia Neonatorum	30	26	11	22	14	20	7	17	16	22	7
Poliomyelitis	111	285	282	471	362	663	733	1,777	466	364	134
Rabies, Animal	438	332	75	38	11	20	58	84	77	62	122
Rocky Mt. Spotted Fever	2	0	0	0	2	2	0	2	1	0	0
Salmonellosis**	132	135	150	39	120	78	91	63	223	156	239
Scarlet Fever***	441	485	384	277	456	460	592	632	726	647	1,397
Syphilis	16,653	15,395	12,363	10,738	9,445	10,824	6,722	6,894	5,541	7,182	5,514
Tetanus	27	73	71	43	34	46	44	59	53	47	64
Trachoma	0	0	0	1	0	1	1	0	1	0	0
Tuberculosis	4,335	3,313	3,198	2,337	2,590	2,603	2,424	2,461	2,253	2,453	2,414
Tularemia	8	19	29	18	6	18	7	3	5	2	2
Typhoid Fever	66	103	51	30	23	36	41	31	56	60	54
Typhus Fever	340	166	123	34	20	11	10	5	11	6	5
Whooping Cough	1,861	731	191	471	920	291	209	339	1,080	547	221

* Includes other and unspecified.
 ** Includes Paratyphoid Fever.
 *** Includes Streptococcal Infection.

DIVISION OF INDUSTRIAL HYGIENE

JOHN M. McDONALD, M.D., M.P.H.
 Director

LABORATORY

Again, as in 1956, air pollution control provided a considerable number of samples requiring analysis in the industrial hygiene laboratory. Air contamination by fluorides accounted for 54 samples. In addition, numerous field tests were made for sulfur dioxide, relative humidity, and other physical conditions.

Industrial hygiene work required 648 analyses, of which 290 were for the determination of lead in blood or urine, or in air samples from industrial environments. It should be noted here that the chemists not only performed the laboratory analyses, but also made field trips to

collect samples, conduct industrial hygiene surveys and consult with industrial management. Approximately one-third of their time was spent in the field.

AIR POLLUTION

At its 1957 session, the Florida Legislature passed the Florida Air Pollution Control Law. One provision of this law required the creation of an Air Pollution Control Commission within the State Board of Health. This commission has already been appointed and has held its organization meeting. This division has begun to assist the Commission in its search for information on air pollution control, and looks forward to increased cooperation in the future.

Members of the Commission presently serving are: Thomas H. Lipscomb, M.D., Chairman, and Albert V. Hardy, M.D., Jacksonville; Willard D. Miller, M.D., Ruskin; E. T. Casler, Bartow; Arthur Crago, Brewster; E. R. Henrickson, Ph.D., Gainesville, Vice-Chairman; A. P. McIntosh and B. R. Fuller, Jr., Tallahassee; George Westbrook, Ph.D., Winter Haven. David B. Lee of the Bureau of Sanitary Engineering serves the Commission as secretary.

The stack sampling of phosphate processing plants which was begun last year has been continued in an effort to determine the amount of fluorine compounds discharged to the atmosphere by each plant stack. While this work, including travel time and laboratory procedures, has required a large number of man hours, it has been encouraging to observe that practically every plant has installed new equipment to recover fluorides from stack discharges. Recovery of fluorides has been further stimulated by the opening of a small plant in the area where fluorides from plant effluents are collected and further processed for use in refining of aluminum.

Operation of oil fired boilers gave rise to several complaints of air pollution. In one case a boiler was furnishing steam to operate a power generator mounted on a barge. Workers on nearby docks complained of eye and throat irritation which was shown to be due to sulfur dioxide and other products of combustion in the stack discharge from the boiler. Corrective measures were suggested. Faulty operation of the automatic feed on oil fired boilers in laundries often causes intermittent emissions of smoke. In two cases the smoke nuisance was corrected by adjustments of the burner mechanism.

Complaints of discolored house paint came from an area near a small oil refinery. The complainants blamed the refinery for the discoloration. Upon investigation it was found that the offending material was sand which had been deposited by a windstorm during the night.

EDUCATION

Brief talks were given to five orientation groups. Three half-days were spent discussing industrial hygiene and air pollution control with

three classes of county health department sanitarians in the field training program. A group of engineering students from the University of Florida came to the division for an afternoon's discussion of air pollution investigation and control. Three physicians in public health training were shown several industrial plants to illustrate the work in industrial hygiene. One lecture on dust diseases of the lungs was presented to junior medical students of the University of Miami School of Medicine.

SPECIAL STUDIES

One of the major undertakings of the year was cooperation with the U.S. Public Health Service in making a preliminary industrial hygiene study of working conditions in the phosphate processing plants. The director spent about four weeks in making the preliminary contacts and accompanying USPHS officials in setting up arrangements for the study. One chemist spent four weeks and another three weeks full time in taking air samples in these plants as part of the study. Results of the study are not yet available.

Dust studies were made in two ferrous foundries at the request of the respective managements. Included in this were silica dust exposures and carbon monoxide hazards covering a total of 214 employees. A study was also begun in a concrete block plant to investigate potential dust exposures from sand blasting and block grinding. Another study was made in a phosphate rock processing plant at the request of plant management in order to teach their technical staff modern methods of dust counting. The data thus obtained were used as a basis for selecting suitable air pollution control devices. At the same time it was shown that no silicosis hazard was present in this operation.

Although lead poisoning has been recognized for at least 2500 years, it is still a threat to some industrial workers. Both blood lead and urine lead determinations were done on 70 employees in a large airplane maintenance shop because of potential exposures to tetraethyl lead in the high octane gasoline used in modern airplane engines. No case of abnormal lead absorption was found. A similar study was made of the employees in a lead smelting plant. Abnormal lead absorption was found in seven out of eleven employees. Recommendations were made for control of the lead poisoning hazard.

Of special interest were two studies of dust exposures in plants making stucco mixes which are used for the exterior finishing of houses constructed of concrete blocks. In one plant dust counts were well below maximum allowable concentrations. In the other plant a definite silicosis hazard was found and the process is now being re-designed to reduce the exposure to silica dust.

PERSONNEL

In preparation for an expected increase in division staff, some time was spent in writing specifications for additional personnel, as well as

the position classification questionnaires required by the Florida Merit System. Mr. R. L. Hebblethwaite returned from sick leave on May 15 after an absence of nine months.

COOPERATION WITH OTHER AGENCIES

At the request of the U.S. Public Health Service Radiation Surveillance Network, the division resumed operation of the high volume air sampler in May. This coincided with the start of the Nevada tests conducted by the Atomic Energy Commission. Filters were changed seven days a week and monitored for radioactivity. Background radiation counts were made twice a day. The filters and reports of monitoring were then forwarded to the USPHS Surveillance Laboratories in Washington, D.C. for the final evaluation of radioactive particles collected.

In July a precipitation collector was placed in operation. Samples of rain water were evaporated to dryness and the residue checked for radioactivity by the USPHS laboratories. Operation of the precipitation collector ceased on December 1. Operation of the high volume air sampler was continued on an intermittent basis.

Considerable public interest was aroused by newspaper articles concerning the risk of possible poisoning to small children by the lead content in paints on imported toys. As a result, the chemists of the division were requested to analyze the paint from a number of these toys. Toys were received from various department stores, public groups and private individuals. Approximately two weeks were spent by division personnel on this project. This was part of a nationwide study. On the basis of the pooled findings of many investigations, the USPHS issued a statement to the effect that the amounts of lead found were so small that children could play with these toys without any risk of injury to their health.

MISCELLANEOUS ACTIVITIES

Among the meetings attended were the American Conference of Governmental Industrial Hygienists and the American Industrial Hygiene Association held in St. Louis; Industrial Wastes Workshop, Lakeland; Sanitary Engineering Conference, Gainesville; American Chemical Society, Miami; and the Florida Air Pollution Control Commission at Tallahassee. Two legislative committee meetings on air pollution were attended.

Consultation was provided for the design of the new laboratory in Orlando. Individual conferences were held with three physicians engaged in industrial medical practice. With the assistance of other staff physicians, the division continued to furnish First Aid for employees.

TABLE 19
SUMMARY OF INDUSTRIAL HYGIENE ACTIVITIES
JANUARY — DECEMBER, 1957

FIELD ACTIVITIES

Number of industrial establishments given service	65
Number of workers affected by services	2,729
Number of other places and areas visited	14

Number of Field Visits Made:

Planned or self-initiated	31
Requests or complaints	19
Agency referrals	12
Revisits	45
Total.....	107

Environmental Recommendations:

Number made	6
Number complied with	4

Field Determinations:

Atmospheric contaminants	25
Physical conditions	30
Radiation monitoring	319
Total.....	374

Plant Environmental Services

	No. of Visits
Routine inspection	12
Industrial hygiene surveys	19
Technical study of hazards	15
Consultation only	6
Follow-up	4
Discuss report	13
Other	14
Total.....	83

Samples Collected: 134

Samples Received: 304

Other Technical Investigations

Air pollution	17
Radiation surveys (non-indus.) ..	3
Non-occupational problem	1
Total.....	21

Laboratory Analyses:

Routine	302
Air pollution	58
Biological	288
Total.....	648

RELATED ACTIVITIES

Office consultation services and inquiries handled	61
Lectures given	6
Meetings attended ..	14
Demonstrations	6
Attendance	177
Climatology letters..	133

DIVISION OF TUBERCULOSIS CONTROL

C. M. SHARP, M.D.
Director

Florida continues to make favorable strides in tuberculosis control. The adequate provisions for hospitalization of all patients needing treatment as well as the extensive use of anti-tuberculosis drugs has continued to make itself felt in the decreased stay of patients in hospitals, as well as lowering the hospital census. It is noteworthy, however, that more cases were discovered and hospitalized during 1957 than in any other previous year.

The annual report of the State Tuberculosis Board indicates that the support for hospitalization has been quite adequate, but the financial support for case-finding has been less than adequate. If a real measure of control is to be attained in the state, the support for case-finding and follow up should be increased, and yet we are faced with a \$21,000 cut in Federal funds if the President's budget is accepted by Congress.

The continued availability of drugs for the out-patient treatment of post-sanatorium cases has probably gone a long way toward preventing relapses from this disease. This, along with the marked decrease in death rates, means that the follow up of cases by local health departments will be an ever increasing load since most cases must be followed for years. Many county health departments indicate that approximately 30 per cent of their activity is directed toward tuberculosis control.

Some of the improved case-finding activities during the past year are indicated by admissions and discharges from the tuberculosis hospitals. For example, in 1953-54 1635 patients were admitted to our hospitals while 1535 were discharged. In 1956-57 1812 patients were admitted and 1799 were discharged. The number of admissions in 1955-57 increased 12 per cent over the previous biennium even though the expansion in case-finding activities occurred only during fourteen months of this period. Practically all of the increase can be accounted for by increase in effectiveness and coverage by X-ray surveys.

The death rate from tuberculosis reached a new low of 6.1 deaths per 100,000 population in 1957. Compared with a recent release from the U. S. Public Health Service indicating a tuberculosis death rate of 8.7 per 100,000 population in the United States, one can see that Florida is 30 per cent lower than the country as a whole. The number of tuberculosis deaths totaled 252 in 1957 as against 244 in 1956.

The accelerated drop in the Negro death rate continues over that of the white population due to the availability of adequate facilities for treatment and the rapidly favorable response of the Negro population to anti-tuberculosis drug therapy. The Negro death rate has declined from 44.1 per 100,000 in 1950 to 11.8 in 1957. The white tuberculosis death rate declined nearly 60 per cent during the same eight year period to reach a record low of 4.8 deaths per 100,000 population.

MORBIDITY

The extent of the tuberculosis problem can no longer be determined by mortality alone, as has been the case in the past. That the disease is still with us can be seen in Table 21. There were 2414 cases reported in 1957 with a case rate of 57.0 per 100,000. This compares with 2453 for 1956 and 2337 for 1950. The growth of the state accounts for the fact that the case rate per 100,000 has decreased from 83.5 in 1950 to 57.0 in 1957 — even though fewer cases were reported in 1950.

Table 22 shows the number and percentage of reported tuberculosis cases by stage of the disease, race, sex, age, and source of the report

for the years 1956 and 1957. There were 39 fewer cases reported in 1957 than in the previous year. The number of minimal cases increased to 16.2 per cent of the total cases reported while the proportion of far advanced cases showed a two per cent decrease since 1956.

White male cases constituted 46 per cent of all reported cases, as shown in Table 22, which is approximately the same proportion as in 1956; and the age group 45 and over accounted for over 50 per cent of cases reported.

Private physicians are listed as reporting only 1.7 per cent cases, but much of the reporting from health departments is originally referred by private physicians, and in some areas constitutes 50 per cent of the source of all reporting. Cases first reported by death certificates decreased only slightly, and there seems to be little likelihood that we will ever get a further appreciable reduction. As usual, health departments and sanatoria reported over 80 per cent of all reported cases.

CASE-FINDING

One of the major activities of the division is still community-wide chest X-ray surveys. This is the first full year of operation where the division utilized six mobile units, four of which had their own generators. However, there has been a wide scale reaction against X-ray surveys due to newspaper publicity concerning the dangers of radiation. It is true that in a few areas of the United States, chiefly in areas with all white populations where the tuberculosis rates have always been low, the decrease in tuberculosis has diminished to the point where the disease can scarcely be considered an important public health problem and X-ray surveys should be discontinued. However, this is certainly not true in Florida since the population has increased so rapidly in the older age group where we find over 50 per cent of our cases. Our case finding activities have been along the lines of increasing the emphasis on high incidence areas and eliminating high school and college X-ray surveys, and replacing them with tuberculin testing programs.

The maximum permissible dose of radiation according to the Academy of Science is ten times greater than the amount of radiation one would obtain by annual X-ray between the ages 15-30. After age 30 the genetic effects are not nearly so important. Our chief X-ray technician has attended a course on X-ray safety precautions and he has calibrated our X-ray equipment for maximum safety, and will gradually do the same for all equipment owned and operated by county health departments and tuberculosis associations.

In spite of the two additional X-ray machines as well as better work in community organization, fewer X-rays were taken in 1957 than were expected. A total of 758,921 films were made instead of the expected 800,000 to 900,000 X-rays. We feel that publicity concerning the harmful effects of radiation was largely the cause of the decrease in community response. In spite of this, 746 cases of new tuberculosis were uncovered

and a 75 per cent follow-up was performed. An additional 378 cases of previously known tuberculosis were recontacted. Hospitalization was recommended for 273 cases.

An additional 263 persons were diagnosed as suspicious of tuberculosis, many of whom will be active. The new case rate per 100,000 satisfactory 70 MM. films increased to 100.4 in 1957. The complete survey findings can be found in Table 23, which also shows the relatively large amount of other pathology found as a significant by-product of tuberculosis case finding.

A new case finding technique has been started, first in Palm Beach and Broward Counties, by tuberculin testing kindergarten and first graders and examining the contacts of the positive reactors to try and find cases of adult tuberculosis. This promises to be an excellent case-finding procedure.

A new manual on tuberculin testing was prepared and distributed to all counties with an expansion of this activity contemplated during 1958.

CONSULTATION AND DIAGNOSTIC CLINICS

An analysis of films made at diagnostic clinics in county health departments, and consultation X-rays shows a marked increase in activity. There was a 26 per cent increase in films read over 1956, and an increase of 366 cases of tuberculosis read in 1957 over the previous year.

CENTRAL TUBERCULOSIS CASE REGISTER

A large part of the activity of the central office as well as county health departments concerns itself with compiling statistics on the known tuberculosis case load. As usual this activity can be subject to a great deal of error due to lack of proper communication between the central register and county units, and visits have been made to many local registers in an attempt to correctly correlate this information.

In 1957, 30.0 per cent of all cases in the register are considered active and of these 50.4 per cent are currently hospitalized. In spite of the empty beds in our hospitals, 49.6 per cent of cases considered active are still residing at home, many of whom have been given voluntary hospital discharges. Of the active cases at home, 20.5 per cent are considered as having positive sputum as against 21.3 per cent last year. When we compare this to 1953 we can see a decided improvement over the 45 per cent during that year.

Those with negative sputum decreased to 36.0 per cent with a consequent rise in undetermined sputums as a result of no sputum examinations done.

Non-pulmonary tuberculosis cases increased from 119 in 1956 to 174 in 1957 — a 46 per cent increase in the register, which is cumulative.

It is interesting to note there has been a tremendous increase (over 1000 per cent) of tuberculin reactors in cattle. Whether this can be related to increase in human non-pulmonary disease cannot be stated since practically all milk is pasteurized.

ACTIVITIES IN LOCAL HEALTH UNITS

A continuing increase in the backlog of cases along with the out-patient administration of anti-tuberculosis drug therapy has accounted for increased activities.

During 1957 there was a total of 2694 active cases admitted to service in county health departments, and an additional 5313 inactive cases who must be given routine follow up, many of whom are on out-patient chemotherapy. Fifteen thousand seven hundred and twenty-one patients were examined as contacts and suspects.

Of the total hospital admissions 1768 were admitted from county health departments.

The county health departments, along with the portable X-ray unit of the State Board of Health, took 40,248 large films on suspects, contacts and that group of the population desiring health cards.

There were 32,949 field visits which were about the same number as for last year, and office visits remained approximately the same at 39,467. There were also 20,435 tuberculin tests done in 1956 as compared to 21,438 in 1957.

TUBERCULOSIS HOSPITALS

Occupancy of tuberculosis hospitals depends in a large measure upon the case-finding activities of state and county health departments. There would seem to be enough active cases residing at home with positive sputum to more than fill vacancies in our hospitals. As of December 31, 1957, of the 390 cases residing at home with positive sputum, 146 have never been hospitalized, 46 have been given voluntary discharges from hospitals, (including Veterans Administration hospitals) and 103 left the hospital "Against Medical Advice" (AMA). Of the 390 home cases known to have positive sputum, 34 have shown bacterial relapse during the past year (many of these are under follow up), and 100, or approximately 30 per cent, whose last sputum examination was positive during the past year, are under the care of a private physician. An additional 19 cases have been given voluntary discharges with atypical acid fast bacilli, which in spite of the fact they may not be tubercle bacilli, have been counted as such.

There must be a large number of the undetermined sputum patients residing at home whose sputum would be positive if examined.

The number of empty beds in our tuberculosis hospitals, if continued, may result in the loss of a hospital, so it behooves us to make

every attempt to cut down on the vacant bed situation by having more patients admitted. The number of admissions did increase by 12 per cent over the past two years and the total patients treated during the biennium increased by 8 per cent.

That our hospitals are rendering better service to patients can be proved by the AMA (left hospital "against medical advice") rates. The number of live discharges who left the hospital with medical advice increased from 61 per cent during the past biennium to 79 per cent during the biennium 1955-57. Irregular discharges decreased from 39 per cent to 21 per cent during the same period, which probably means that patients were better satisfied and more amenable to treatment because of a shorter stay in the hospital and the relaxing of some of the rigid rules in vogue before the advent of chemotherapy.

We still feel that in spite of several hundred empty beds there is and will continue to be ample justification for continuing to operate the four tuberculosis hospitals.

TABLE 20

DEATHS FROM TUBERCULOSIS (ALL FORMS) AND DEATH RATES PER 100,000 POPULATION BY COLOR, FLORIDA, SELECTED YEARS

YEAR	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1957*	260	6.1	166	4.8	94	11.8
1956	244	6.3	156	4.9	88	12.0
1955	281	7.7	175	6.0	106	14.6
1954	283	8.1	159	5.7	124	18.1
1953	303	9.7	171	6.9	132	20.7
1952	501	16.7	250	10.5	251	40.0
1951	518	17.9	279	12.2	239	38.7
1950	522	18.7	254	11.6	268	44.1
1945	708	31.1	339	19.7	369	66.2
1940	973	50.8	375	26.8	598	115.6
1935	908	56.0	395	34.3	513	109.4
1930	1,015	68.6	432	41.3	583	134.0
1925	999	80.8	426	50.0	573	148.7
1920	1,016	102.3	423	64.3	593	176.8

* Preliminary Data

Note: Deaths and rates, 1930, 1925 and 1920 are by place of occurrence. Other years by place of residence.

TABLE 21
TUBERCULOSIS CASES REPORTED, CASE RATES,
DEATHS, & DEATH RATES PER 100,000 POPULATION,
FLORIDA 1948-1957

Year	Cases Reported	Case Rate	Deaths	Death Rate
1957	2,414	57.0	260*	6.1*
1956	2,453	63.3	244	6.3
1955	2,253	61.4	281	7.7
1954	2,461	70.6	283	8.1
1953	2,424	77.9	303	9.7
1952	2,603	86.5	501	16.6
1951	2,520	86.8	518	17.8
1950	2,337	83.5	522	18.7
1949	3,198	118.7	659	24.4
1948	3,313	128.0	720	27.8

* Preliminary Data

TABLE 22
NUMBER AND PERCENTAGE OF REPORTED TUBERCULOSIS
CASES BY STAGE OF DISEASE, RACE AND SEX, AGE,
AND SOURCE OF REPORT. FLORIDA 1956 AND 1957

Stage of Disease, Race and Sex, Age and Source of Report	1956		1957	
	Cases	Percent	Cases	Percent
TOTAL CASES	2,453	100.0	2,414	100.0
STAGE OF DISEASE				
Primary	73	3.0	76	3.1
Minimal	348	14.2	390	16.2
Moderately Advanced	993	40.5	833	34.5
Far Advanced	634	25.8	564	23.4
Non-Pulmonary	59	2.4	44	1.8
Unknown	346	14.1	507	21.0
RACE AND SEX				
White Male	1,124	45.8	1,115	46.2
White Female	570	23.2	569	23.6
Colored Male	447	18.2	433	17.9
Colored Female	266	10.9	252	10.4
Unknown	46	1.9	45	1.9
AGE				
Under 5	57	2.3	71	3.0
5-14	50	2.0	54	2.2
15-24	164	6.7	154	6.4
25-44	871	35.5	816	33.8
45-64	844	34.4	852	35.3
65 Plus	400	16.3	418	17.3
Unknown	67	2.8	49	2.0
SOURCE OF REPORT				
Health Department	1,677	68.4	1,604	66.4
Sanatoria	322	13.1	385	16.0
Private Physicians	42	1.7	42	1.7
General Hospitals	23	.9	4	.2
Out-of-State	151	6.2	179	7.4
Death Certificates	59	2.4	55	2.3
Veterans Hospitals	150	6.1	133	5.5
Florida State Prisons	24	1.0	8	.3
Florida State Hospital	1	.0	2	.1
U.S. Recruiting Stations	4	.2	2	.1

TABLE 23
RESULTS OF 70mm X-RAY SCREENINGS AND 14" x 17" FOLLOW-UP
FILMS ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1957

Race and Sex, Age, and County	70mm X-RAYS					14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS																																																																																									
	Film Impressions					FINDINGS					NEW CASES FOUND					By Stage				By Act.				New Case Rate (d)																																																																																	
	Population of					Total Films					Percent Follow-up (c)					Old Cases					New Cases					Suspected Tuberculosis					Other Pathology					Diagnosis Reserved					Negative					Minimal					Moderately Advanced					Far Advanced					Unknown					Active and Prob. Active					Inactive and Prob. Inactive					Hospitalization Recommended					New Case Rate (d)					Active Old Cases					Cardiovascular					Tumor					Other Pathology				
	Total Films (a)	Definite or Suspected Tuberculosis	Other Pathology	Negative	Percent of Population (b)	Total Films	Definite or Suspected Tuberculosis	Other Pathology	Negative	Percent Follow-up (c)	New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosis Reserved	Negative	Minimal	Moderately Advanced	Far Advanced	Unknown	Active and Prob. Active	Inactive and Prob. Inactive	Hospitalization Recommended	New Case Rate (d)	Active Old Cases	Cardiovascular	Tumor	Other Pathology																																																																													
GRAND TOTAL	758,921	29.4	6,425	5,965	746,531	4,671	75.2	746	378	263	1,369	528	1,387	228	361	123	34	418	328	273	100.4	35	2,454	987	3,893																																																																																
MASS SURVEY X-RAY SCREENINGS WITH 14" x 17" FOLLOW-UP																																																																																																									
SUB TOTAL	491,298	30.1	3,675	3,159	484,464	2,853	79.6	546	159	133	929	369	717	176	282	61	27	263	283	156	112.7	19	1,268	717	2,103																																																																																
RACE AND SEX																																																																																																									
White Male	194,691	30.2	1,999	1,329	191,363	1,592	79.6	306	84	86	573	203	340	93	156	36	21	153	153	90	157.2	10	419	385	1,098																																																																																
White Female	213,104	32.2	1,178	1,185	210,741	1,927	78.7	183	54	30	279	113	268	73	98	8	4	67	116	31	85.9	5	440	244	780																																																																																
Nonwhite Male	37,899	23.9	282	313	37,304	180	63.8	30	13	9	48	28	52	2	17	11	..	25	5	22	79.2	3	202	38	121																																																																																
Nonwhite Female	32,375	19.4	140	260	31,975	101	72.1	19	3	5	17	15	42	3	10	6	2	16	3	1	60.5	1	176	34	67																																																																																
Unknown	13,229	...	76	72	13,081	53	69.7	8	5	3	12	10	15	5	1	...	2	2	2	6	1	31	16	37																																																																															
AGE																																																																																																									
15-24	110,808	37.9	183	167	110,458	142	77.6	16	6	4	20	15	81	5	6	5	...	15	1	12	14.4	...	58	39	90																																																																																
25-34	105,106	31.3	278	184	104,644	217	78.1	35	12	30	51	17	97	9	20	3	3	24	40	20	33.3	...	107	92	276																																																																																
35-44	97,290	29.5	521	361	96,408	412	79.1	82	30	28	114	51	107	29	44	8	1	42	42	25	84.3	...	197	135	379																																																																																
45-54	76,809	28.9	709	524	75,576	559	78.8	135	39	17	187	72	109	44	64	15	12	65	70	40	175.8	...	286	150	507																																																																																
55-64	53,372	27.0	808	726	51,838	623	77.1	134	32	28	217	74	138	47	65	15	7	51	83	31	251.1	...	537	210	713																																																																																
65 and over	38,087	18.1	1,105	1,132	35,850	853	77.4	141	38	48	328	132	168	42	80	15	4	66	75	28	370.2	...	31	18	28																																																																																
Unknown	9,826	...	71	65	9,690	45	63.4	3	2	3	12	8	17	...	3	...	2	2	1	...	30.5	...	...	...	...																																																																												
COUNTY																																																																																																									
Alachua	11,024	23.6	41	64	10,919	29	70.7	1	3	1	13	2	9	...	2	1	...	1	...	1	9.1	...	31	17	29																																																																																
Bay	15,657	39.7	86	64	15,507	79	91.9	48	13	13	19	11	33	16	22	7	...	15	...	...	31.9	...	27	26	30																																																																														
Broward	38,280	21.0	270	262	37,748	213	78.9	4	5	3	56	3	52	1	4	...	...	33	...	7	125.4	...	93	105	121																																																																														
Calhoun	1,617	35.0	6	15	1,596	5	83.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...																																																														
Collier	3,623	37.0	15	21	3,587	8	53.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...																																																														
Gulf	3,623	37.0	15	21	3,587	8	53.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...																																																														
Dade	179,771	28.1	1,939	1,234	176,598	1,599	82.5	359	71	71	541	198	359	124	188	32	15	159	200	85	199.7	9	446	262	1,059																																																																																
DeSoto	3,616	48.4	46	12	3,558	36	78.3	5	1	1	16	7	21	6	4	1	...	...	...	...	...	...	...	...	...																																																																							
Escambia	19,829	18.8	97	82	19,650	52	53.6	2	6	1	13	9	21	3	...	...	...	...	...	...	...	...	...	...	...																																																																					
Fla. A. & M. Univ.	552	33.9	9	...	543	3	33.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...																																																														
Glades	2,106	24.7	19	11	2,076	13	68.4	2	2	2	3	3	5	5	...	...	...	...	...	...	...	...	...	...	...																																																																					
Hardee	2,106	24.7	19	7	2,076	13	68.4	2	2	2	3	3	5	5	...	...	...	...	...	...	...	...	...	...	...																																																																					
Hendry	3,653	30.4	49	24	3,604	35	71.4	7	3	3	4	4	12	1	...	...	...	...	...	...	...	...	...	...	...																																																																					
Highways	2,382	31.0	26	24	2,356	13	73.4	7	3	3	4	4	12	1	...	...	...	...	...	...	...	...	...	...	...																																																																					

RESULTS OF 70mm X-RAY SCREENINGS AND 14" x 17" FOLLOW-UP
FILMS ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1957

Race and Sex, Age, and County	70mm X-RAYS					14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS												
	Film Impressions					FINDINGS					NEW CASES FOUND					NEW CASES FOUND												
	Total Films (a)	Percent of Population (b)	Definite or Suspected Tuberculosis	Other Pathology	Negative	Total Films	Percent Follow-up (c)	New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosis Reserved	Negative	By Stage					By Act.					New Case Rate (d)	Active Old Cases	Cardiovascular	Tumor	Other Pathology
														Minimal	Moderately Advanced	Far Advanced	Primary and Unknown	By Act.		Hospitalization Recommended								
																		Active and Prob. Active	Inactive and Prob. Inactive									
Leon	12,270	27.6	42	51	12,177	35	83.3	9	1	1	14	3	12	1	4	2	3	4	4	2	4	48.9	..	25	20	20		
Monroe	6,013	19.8	33	24	5,956	28	84.8	8	1	5	3	..	15	4	4	1	1	8.6	..	10	7	10		
Ocala	11,588	33.4	60	33	11,495	218	71.7	1	6	5	9	..	30	9	21	5	2	22	15	..	17	63.4	1	10	18			
Palm Beach	58,328	40.5	266	455	57,607	218	82.0	37	12	10	88	41	7	7	2	5	2	2	2	4	3	132.8	2	218	40			
Pasco	3,271	23.9	40	60	3,171	27	67.5	10	3	11	64	10	39	4	4	5	1	6	4	..	3	33.3	2	43	5			
Polk	29,866	24.0	186	117	29,683	139	74.7	10	5	..	5	4	14	2	7	4	..	8	5	..	8	143.1	1	53	7			
Santa Rosa	3,004	20.4	37	20	2,947	23	62.2	13	2	..	8	11	14	1	1	..	1	1	1	..	1	84.1	..	4	8			
Seminole	9,083	32.3	61	117	8,905	48	78.3	2	3	..	9	1	4	1	..	..	..	..	..	..	..	..	..	7	11
Sumter	2,378	30.9	16	9	2,344	11	75.0	2	..	1	2	1	1	..	..	..	..	..	..	..	..	..	..	1	6
Walton	2,865	29.7	12	10	2,844	11	91.7	..	..	1	2	1	1	..	..	..	..	..	..	..	..	..	..	3	1
Washington	1,778	27.1	14	10	1,754	2	75.0	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	8	1
Fla. A. & M. Univ.	2,722	96.6	4	8	2,710	2	50.0	..	..	..	1	1	..	..	..	..	..	..	..	..	..	28.0	..	13	2
Fla. State Univ.	7,141	90.3	8	15	7,118	2	87.5	2	1	..	4	..	5	..	..	..	..	..	..	..	..	..	..	10	1
Univ. of Fla.	12,025	83.3	19	30	11,976	16	84.2	..	4	1	5	1	30	22			
Fla. State Hospital	6,931	81.8	90	59	6,782			

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TABLE 24

FINDINGS OF CLINIC AND CONSULTATION (14 x 17) CHEST X-RAYS INTERPRETED IN 1957 BY SUBMITTING FACILITY, REASON FOR TAKING FILM, RACE AND SEX, AGE AND ACTIVITY. FLORIDA

Submitting Facility, Reason for Taking Film, Race, Sex and Age and Tuberculosis by Activity.	Total Films	Negative	Tuberculosis Pathology by Stage						Suspected Tuberculosis	Non Tuberculosis Pathology		Unknown
			Total	Minimal	Moderately Advanced	Far Advanced	Stage Unknown	Primary		Calcification	Other Pathology		Diagnosis Reserved
TOTAL	25,686	17,499	4,997	1,594	2,158	391	651	203	317	537	1,012	1,039
FACILITY SUBMITTING FILM												
Diagnostic X-Ray Clinic	4,625	1,913	1,582	490	732	113	204	43	114	217	395	350
County Health Department	17,946	12,848	3,306	1,077	1,366	262	444	157	176	278	520	602
Private Physician	429	298	27	6	11	7	.....	3	8	12	35	42
General Hospital	242	195	10	1	7	2	.....	.....	6	5	18	8
State Prisons	2,351	2,202	63	18	38	5	2	.....	13	15	34	21
Florida Farm Colony	36	24	5	2	2	1	.....	.....	.....	.....	5	5
Other	57	19	4	.....	2	1	1	.....	.....	10	10	11
REASON FOR TAKING FILM												
Mass Survey Follow-up	2,877	1,085	510	167	273	42	27	1	142	279	437	385
Known Case Follow-up	4,442	30	4,207	1,362	1,778	296	612	159	19	29	13	100
Suspect Follow-up	1,304	746	72	13	31	15	6	7	59	71	149	182
Contact of Case	3,245	2,954	66	10	15	8	.....	33	32	27	48	72
Possible Source Case	79	67	2	.....	1	.....	.....	1	1	2	2	1
School Employee	1,269	1,239	1	1	.....	.....	.....	.....	.....	8	8	9
Food Handler, etc.	6,586	6,306	31	12	11	6	2	.....	12	38	72	57
Military Examination	28	25	.....	.....	.....	.....	.....	.....	.....	.....	1	2
Prenatal	83	78	2	2	.....	.....	.....	.....	1	.....	1	1
Medical Personnel	273	257	1	.....	1	.....	.....	.....	.....	2	7	3
Other	5,500	4,712	105	27	48	24	4	2	51	81	274	227
RACE AND SEX												
White Male	9,300	5,775	2,041	599	984	199	207	52	149	277	487	480
White Female	9,384	7,084	1,299	484	540	61	172	42	92	194	307	299
Colored Male	3,398	2,061	948	261	404	81	147	55	44	38	131	145
Colored Female	3,449	2,468	701	249	225	50	123	54	31	21	74	104
Unknown	155	111	8	1	5	.....	2	.....	1	7	13	11
AGE												
Under 5	226	77	73	3	.....	.....	.....	70	18	1	3	28
5-14	1,527	1,246	138	10	.....	.....	4	124	28	14	29	48
15-24	3,708	3,332	216	107	57	11	32	9	20	10	38	68
25-44	9,466	7,081	1,688	674	613	67	334	.....	75	129	191	227
45-64	7,708	4,474	2,026	599	992	192	243	.....	95	220	407	400
65 and over	2,717	1,023	845	197	492	119	37	.....	78	156	321	250
Unknown	334	266	11	4	4	2	1	.....	3	7	23	18
ACTIVITY												
Active .....	.....	.....	534	16	214	221	15	68	.....	.....	.....	.....
Probably Active	552	85	312	87	20	48
Inactive	360	216	73	10	16	45
Probably Inactive	3,551	1,277	1,559	73	600	42

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TABLE 25

COMPARISON OF TUBERCULOSIS CASE REGISTER
STATISTICS, FLORIDA, 1953-1957

Tuberculosis Cases by Activity, Location and Sputum Status	Number of Cases					Percent Distribution				
	1953	1954	1955	1956	1957	1953	1954	1955	1956	1957
TOTAL CASES IN REGISTER										
Active Pulmonary Tuberculosis	11,608	11,009	10,821	11,893	12,758	100.	100.	100.	100.	100.
Questionably Active Tuberculosis	4,024	3,735	3,631	3,875	3,832	34.7	34.0	33.5	32.6	30.0
Inactive Pulmonary Tuberculosis	1,150	1,028	768	688	627	9.9	9.3	7.1	5.8	4.9
Primary Active Tuberculosis ..	6,281	6,075	6,209	7,048	7,944	54.1	55.2	57.4	59.2	62.3
Non-Pulmonary Tuberculosis ..	63	79	107	163	181	0.5	0.7	1.0	1.4	1.4
.....	90	92	106	119	174	0.8	0.8	1.0	1.0	1.4
ACTIVE PULMONARY TUBERCULOSIS										
Hospitalized	4,024	3,735	3,631	3,875	3,832	100.	100.	100.	100.	100.
At Home	2,115	2,150	1,979	2,022	1,930	52.6	57.6	54.5	52.2	50.4
.....	1,909	1,585	1,652	1,853	1,902	47.4	42.4	45.5	47.8	49.6
ACTIVE PULMONARY CASES AT HOME										
Positive Sputum	1,909	1,585	1,652	1,853	1,902	100.	100.	100.	100.	100.
Negative Sputum	865	424	328	394	390	45.3	26.7	20.0	21.3	20.5
Undertermined Sputum	781	633	769	856	683	40.9	39.9	46.4	46.2	36.0
.....	263	528	555	603	829	13.8	33.4	33.6	32.5	43.5

TABLE 26
ANALYSIS OF CASES IN THE CENTRAL TUBERCULOSIS
CASE REGISTER

COUNTIES	Total Cases	Pulmonary Tuberculosis				Non-Pulmonary Tuberculosis	Active Cases			
		Active	Questionably Active	Inactive	Primary Active		In Hospital	At Home by Sputum Status		
								Positive	Negative	Undetermined
Alachua	303	67	21	213	0	2	30	5	6	26
Baker	17	7	1	9	0	0	2	0	2	3
Bay	161	45	1	114	1	0	22	5	9	9
Bradford	55	22	1	30	1	0	9	3	6	4
Brevard	147	52	1	90	4	0	26	5	10	11
Broward	473	135	17	311	10	0	69	14	31	21
Calhoun	33	4	0	29	0	0	3	0	1	0
Charlotte	27	9	0	17	0	1	1	2	1	5
Citrus	16	6	0	9	0	1	2	0	3	1
Clay	32	14	0	17	1	0	5	0	5	4
Collier	40	13	2	21	2	2	7	0	4	7
Columbia	68	25	3	40	0	0	12	2	4	7
Dade	2,241	751	160	1,280	22	28	398	97	133	123
DeSoto	22	7	1	13	1	0	3	0	2	2
Dixie	18	6	1	11	0	0	4	0	0	2
Duval	1,669	525	39	1,046	15	44	260	50	107	108
Escambia	494	118	25	342	5	4	70	11	9	28
Flagler	16	6	0	10	0	0	2	1	1	2
Franklin	26	7	1	17	1	0	4	1	1	1
Gadsden	108	25	4	78	1	0	15	0	2	8
Gilchrist	9	1	0	7	1	0	0	0	0	1
Glades	6	2	0	4	0	0	2	0	0	0
Gulf	35	14	0	20	0	1	12	1	0	1
Hamilton	40	19	1	20	0	0	8	3	3	5
Hardee	22	8	0	13	1	0	5	0	3	0
Hendry	24	10	1	13	0	0	4	0	3	3
Hernando	31	10	3	18	0	0	4	0	3	3
Highlands	70	29	5	31	2	3	12	2	9	6
Hillsborough	1,163	302	108	717	15	21	173	33	44	52
Holmes	32	14	2	15	1	0	3	1	2	8
Indian River	49	9	1	39	0	0	3	0	2	4
Jackson	152	37	4	107	1	3	23	2	4	8
Jefferson	19	3	1	15	0	0	1	1	0	1
Lafayette	8	2	2	4	0	0	1	1	0	0
Lake	180	54	6	114	2	4	25	6	5	18
Lee	124	52	3	62	4	3	24	6	13	9
Leon	215	47	5	154	4	5	33	3	5	6
Levy	30	10	3	17	0	0	3	2	3	2
Liberty	9	3	2	3	0	1	1	0	1	1
Madison	72	19	0	47	4	2	13	1	2	3
Manatee	148	39	3	103	3	0	17	1	9	12
Marion	144	38	4	97	3	2	21	2	7	8
Martin	55	19	2	31	1	0	9	1	2	7
Monroe	75	28	4	43	0	0	16	2	4	6
Nassau	61	13	2	41	2	3	8	1	2	2
Okaloosa	70	28	6	34	1	1	15	1	1	11
Okeechobee	16	3	2	11	0	0	1	1	0	1
Orange	565	152	13	388	7	5	89	15	31	17
Osceola	73	24	10	38	0	1	8	5	4	7
Palm Beach	594	139	10	419	19	7	77	15	21	26
Pasco	87	38	2	43	2	2	17	4	6	11
Pinellas	738	257	48	420	7	6	113	39	34	71
Polk	593	158	31	382	19	3	66	9	43	40
Putnam	125	38	13	72	2	0	21	2	5	10
St. Johns	105	37	4	61	1	2	22	3	7	5
St. Lucie	78	25	3	45	5	0	9	2	5	10
Santa Rosa	60	32	5	22	0	1	12	2	7	11
Sarasota	136	30	5	98	2	1	10	5	6	9
Seminole	124	44	1	77	0	2	20	8	10	6
Sumter	24	10	2	12	0	0	3	2	2	3
Suwannee	53	20	5	27	1	0	10	0	4	6
Taylor	46	16	4	24	1	1	7	0	7	2
Union	18	4	1	13	0	0	2	0	1	1
Volusia	321	98	13	202	3	5	43	10	8	37
Wakulla	22	7	2	13	0	0	6	0	1	0
Walton	46	14	4	25	3	0	5	1	6	2
Washington	31	8	2	20	0	1	1	1	1	5
Fla. St. Prison	94	24	1	66	0	3	8	0	11	5
STATE	12,758	3,832	627	7,944	181	174	1,930	390	683	829

DIVISION OF VENEREAL DISEASE

C. M. SHARP, M.D.
Acting Director

During 1957, this division lost the services of its full-time medical director, John H. Ackerman, M.D., who was transferred by the U.S. Public Health Service. A second full-time physician H. Donald Hill, M.D., who was in charge of the examination and treatment of patients found through the selective bloodtesting program, resigned from the service and entered private practice in Florida. A new health program representative, Mr. T. A. Beckham, was assigned to the division. There were several changes among the specialized interviewer-investigators in the state due to transfers and resignations. By the year's end, however, there were fourteen such workers in the state: Two each in Duval, Hillsborough, and Dade; one each in Escambia, Leon, Alachua, Broward, and Palm Beach; and three supervisors assigned to the division and covering the sixty-seven counties. In addition to the above personnel changes a USPHS physician, John L. Getz, M.D., was assigned to the division and reassigned to the Duval County-Jacksonville City program.

The format of the program changed only slightly during the year. The major emphasis continued to be the control of infectious syphilis. As shown above, trained interviewer-investigators were assigned to those areas of the state in which the reported incidence and prevalence was high. Although the major portion of each of these men's time was spent in his designated area he was on call to render epidemiologic service to other areas immediately adjacent to the one in which he was assigned. Supplemented by the three men working out of the central office all counties in the state were thus able to receive interviewer-investigator service for acute infectious syphilis cases. As in the past two or three years, infectious syphilis in Florida has been characterized by explosive outbreaks. During the present year there were three such outbreaks. One of these outbreaks occurred in Tallahassee and vicinity and resulted in twenty-six persons being treated for infectious syphilis. This division rendered assistance in the control of this epidemic by assigning additional personnel to the director of the Leon County Health Department during the time covered by the epidemic. The other two epidemics occurred in Tampa and vicinity. One of these, involving white persons, resulted in seven being diagnosed and treated for infectious syphilis. The other was among non-white persons and resulted in ten being diagnosed and treated. It is felt that the application of epidemiologic principles provides the barrier that stands between widespread reoccurrence of syphilis and eventual control. Only very rapid case-finding can prevent the spread of syphilis from one or two cases to an epidemic of major proportions.

In order that no successful method of control be missed, a new procedure was started during the year as an addition to the epidemiologic work program; this program known as "Cluster Testing" involves the interviewing and examining of persons known by patients and having

the same promiscuous pattern, although not necessarily named as sex contacts.

Since roughly one-half of the cases of syphilis, both infectious and noninfectious and approximately five per cent of the cases of gonorrhea reported in Florida are reported by private physicians, continued efforts have been made to develop a co-operative program with the physicians of the state. Treatment manuals have been made available to them. These manuals contain the recommended schedules of treatment as approved by the State Board of Health and the USPHS. A simplified case report card was furnished to all physicians during the year. Further advantage of this form was that it met postal regulations for the use of franking privileges which meant that the physicians could submit their reports at no cost to them. The services of a trained interviewer-investigator have been made available through the division or local health department to any physician in the state who reported a case of infectious syphilis. While most physicians appear to report cases of syphilis either to the local health department or the State Board of Health, cases of gonorrhea seen by physicians in private practice are obviously not reported in most instances. This is reflected in the statistics mentioned above. Since gonorrhea is a crippling disease, especially among the female population, it is somewhat difficult to understand the reluctance of physicians to report these cases. No measurement of the success or failure of our efforts to effectively control gonorrhea can be made until most of these cases are reported.

The selective bloodtesting program was continued during most of 1957. Surveys were conducted in: Walton, Orange, Washington, Gulf, Marion, Suwannee, Putnam, Alachua, Columbia, Hamilton, Jefferson, Volusia, and Madison Counties. In these counties 28,013 specimens were obtained with 1988 positive reactors (7 per cent). All persons over the age of 20 who were tested in connection with the syphilis casefinding program were also tested for diabetes. (Results of the diabetes screening program will be found elsewhere in this report, under the Bureau of Special Health Services). The mass bloodtesting survey program was discontinued in November due to the fact that the yield in number of cases had become insignificant in relation to the extremely high cost of operation. Mass testing has never been a successful means of locating infectious syphilis and as expected only one case of primary syphilis was discovered as a result of survey activity. Since mass bloodtesting surveys have been conducted in most of Florida's counties, it is felt that the reservoir of undiscovered late cases has been significantly decreased.

In-service training continued to receive considerable attention during the past year. All new interviewer-investigators received a minimum of two weeks training at an interviewing school. In addition, field training and orientation were given by one of the supervisory staff. There were two field staff meetings held for all interviewer-investigators. The division participated in the planning and conducting of three

venereal disease institutes which were put on by the Division of Public Health Nursing.

Figures 3, 4, and 5, and table 27 show the incidence rates or the number of cases of venereal disease as reported in Florida during the years 1948 through 1957. It is interesting to note that although the number of cases of syphilis reported in 1957 shows a considerable decrease from the number reported in 1956, the number of infectious cases shows a slight increase. This becomes significant when it is noted that this is the first time in ten years that the number of reported cases of infectious syphilis has been the same or greater than the previous year. This phenomenon reflects the trend reported by the USPHS for the nation as a whole during the past fiscal year. This same trend was reported by nineteen individual states. A further reduction in the number of cases of gonorrhea and the reported incidence of gonorrhea is noted. However, as mentioned previously, gonorrhea statistics have little meaning as long as only a very small portion of those patients treated by private physicians are reported.

A special study was conducted in Florida from February 1 through July 31, 1957, to determine the results of the state premarital serology requirement. A total of 28,767 premarital serology tests were performed of which 3.32 per cent or 956 were reactive. Early, late and other syphilis accounted for 343 new infections being identified while eight primary and secondary cases were found. A total of 605 were previously reported and/or dispositioned to date. It is significant that 36.7 per cent of total reactors were new infections identified as a result of this study.

A study is being conducted in several of the larger counties on health card serology evaluation and will be available in 1958.

FIGURE 3
CASE INCIDENCE OF GONORRHEA
(PER 100,000 POPULATION)
FLORIDA 1948 - 1957

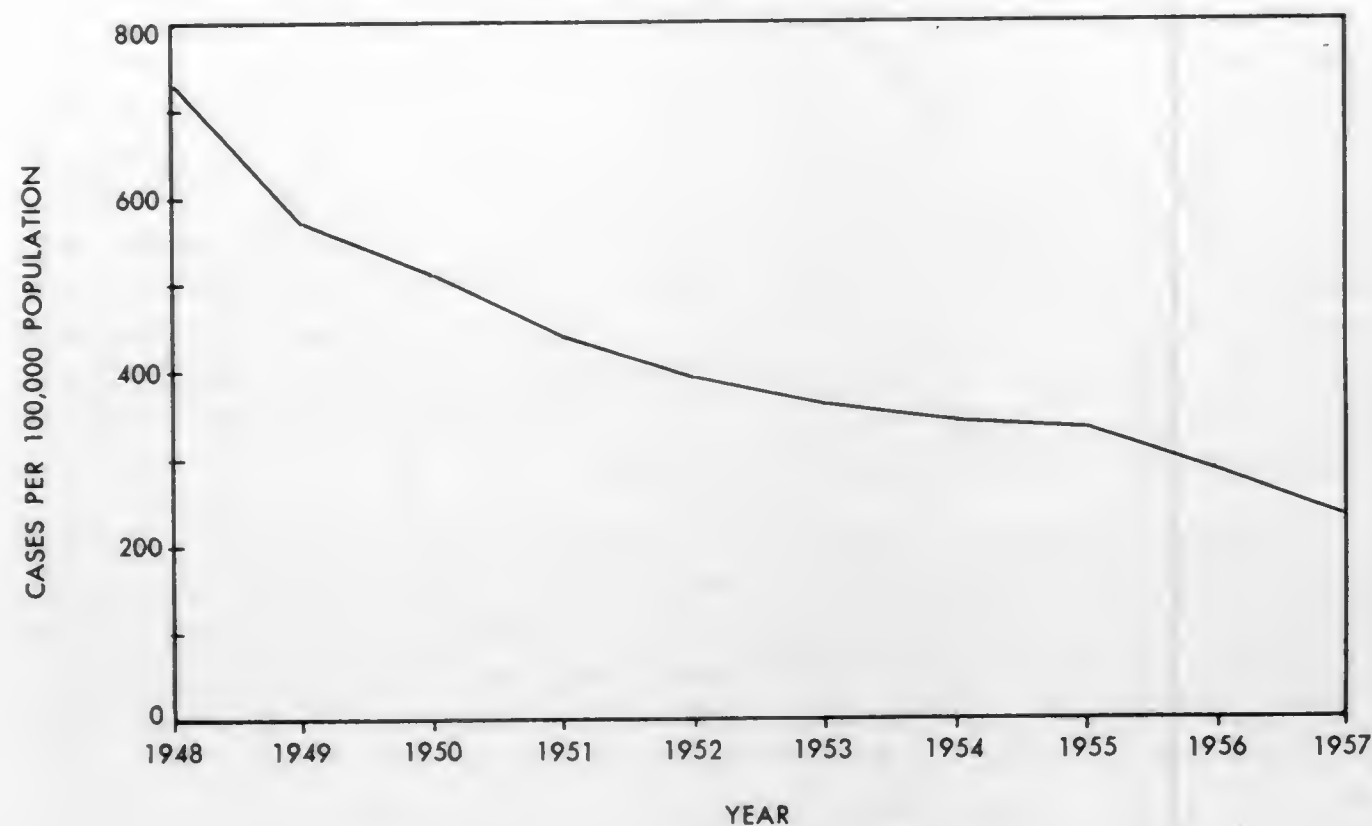


FIGURE 4
CASE INCIDENCE OF SYPHILIS AND STAGE OF INFECTION
(PER 100,000 POPULATION)
FLORIDA 1948 - 1957

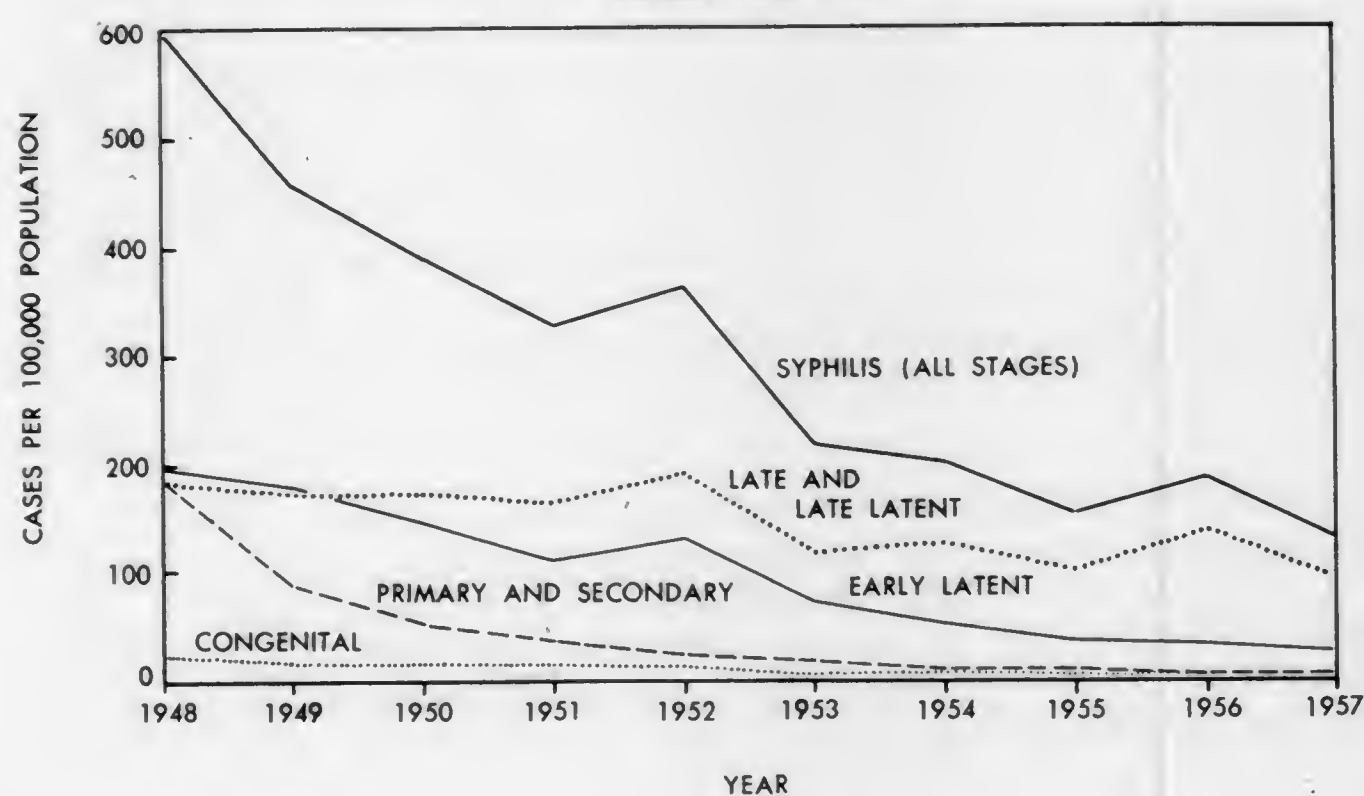


FIGURE 5
CASE INCIDENCE OF CONGENITAL SYPHILIS
(PER 100,000 POPULATION)
FLORIDA 1948 - 1957

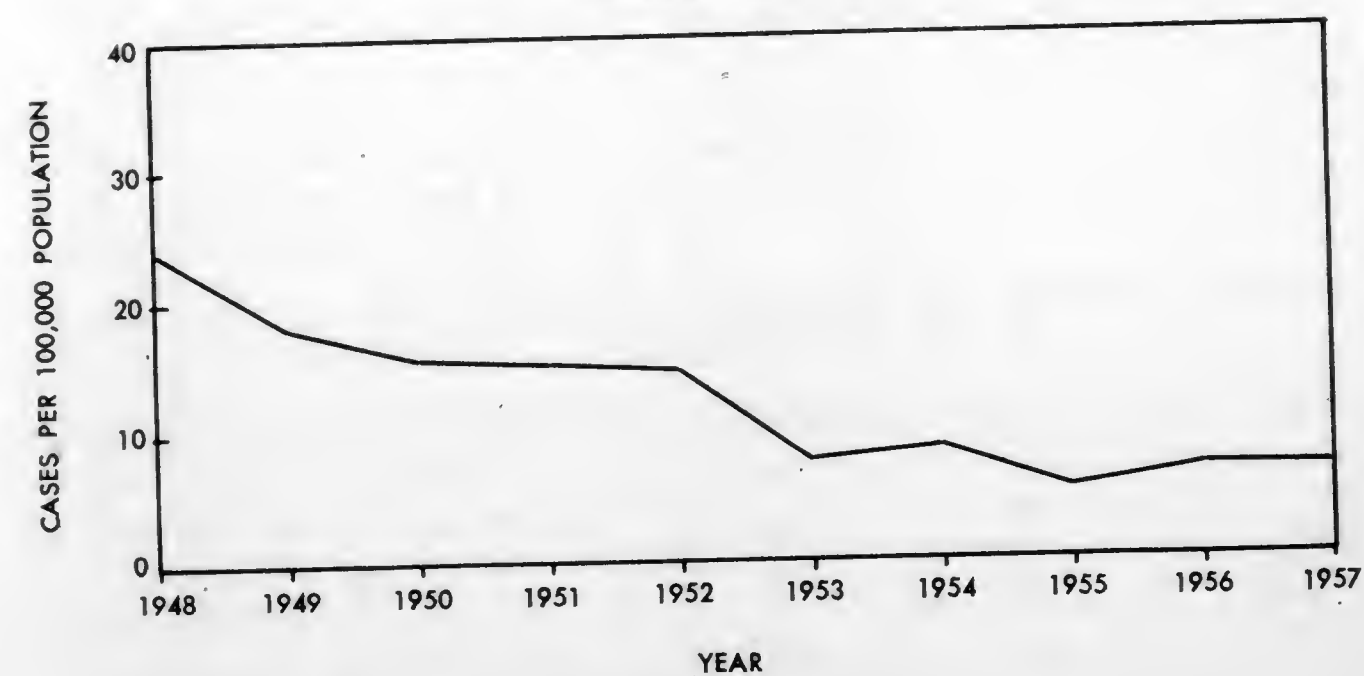


TABLE 27
REPORTED CASES OF VENEREAL DISEASE WITH RATES
PER 100,000 POPULATION, FLORIDA, 1948 — 1957

YEAR	SYPHILIS BY STAGE					GONORRHEA	CHANCROID	GRANULOMA INGUINALE	LYMPHOPATHIA VENEREA
	Total	Primary and Secondary	Early Latent	Late and Late Latent	Congenital				
NUMBER OF CASES									
1957	5,514	213	1,068	3,971	262	9,725	186	66	58
1956	7,182	205	1,372	5,339	266	10,991	273	73	55
1955	5,541	394	1,329	3,616	202	12,146	388	69	51
1954	6,894	448	1,786	4,366	294	11,841	344	71	55
1953	6,722	585	2,245	3,648	244	11,459	328	109	96
1952	10,824	785	3,870	5,730	439	11,809	462	233	120
1951	9,445	1,111	3,188	4,711	435	12,709	317	417	40
1950	10,738	1,509	3,990	4,797	442	14,185	248	446	34
1949	12,363	2,370	4,804	4,706	483	15,388	343	827	127
1948	15,395*	4,837	5,149	4,775	614	18,820	388	773	197
RATE PER 100,000 POPULATION									
1957	130.1	5.0	25.2	93.7	6.2	229.5	4.4	1.6	1.4
1956	184.3	5.3	35.2	137.0	6.8	282.0	7.0	1.9	1.4
1955	152.1	10.8	36.5	99.2	5.5	333.4	10.6	1.9	1.4
1954	198.0	12.9	51.3	125.4	8.4	340.1	9.9	2.0	1.6
1953	216.1	18.8	72.2	117.3	7.8	368.3	10.5	3.5	3.1
1952	360.0	26.1	128.7	190.6	14.6	392.8	15.4	7.8	4.0
1951	325.5	38.3	109.9	162.3	15.0	438.0	10.9	14.4	1.4
1950	383.9	53.9	142.6	171.5	15.8	507.1	8.9	15.9	1.2
1949	459.2	88.0	178.4	174.8	17.9	571.5	12.7	30.7	4.7
1948	594.9	186.9	199.0	184.5	23.7	727.3	15.0	29.9	7.6

*Includes 20 cases with stage not stated.

TABLE 28

TOTAL NUMBER OF SYPHILIS CASES REPORTED BY STAGE OF INFECTION, PREGNANCY STATUS, RACE AND SEX, AND SOURCE OF REPORT, BY COUNTY, FLORIDA, 1957

STATE	Total	Stage of Infection					Pregnancy	Race and Sex				Unknown	Source of Report		
		Primary	Secondary	Early Latent	Late & Latent	Congenital		White		Colored			Clinic	Private Physician	Other
								Male	Female	Male	Female				
Alachua	260			21	220	19	6	4	4	136	115	1	242	18	
Baker	7				7					2	4		4	3	
Bay	22	1		10	11		1	2	5	5	10		11	11	
Bradford	5			1	4			1	1	2	1		3	2	
Brevard	28	1		9	16	2		5	6	11	6		4	24	
Broward	318	9	3	81	215	10	3	58	39	75	135	11	136	182	
Calhoun	2				2			2	2					2	
Charlotte	4			1	3			1	1	2	1		2	4	
Citrus	8			1	6	1		1	2	3	2		3	6	
Clay	16			2	11	3		3	7	3	3		3	13	
Collier	25			9	16		1	3	5	10	7		4	21	
Columbia	108			5	96	7	1	2	2	50	50	4	94	14	
Dade	1,048	31	19	311	647	40	20	211	203	244	356	34	324	724	
DeSoto	20	1		2	16	1		6	8	4	2		1	19	
Dixie	2			1	1					1	1			2	
Duval	609	16	20	121	436	16		87	58	200	247	17	264	345	
Escambia	97	2	1	20	66	8	1	7	28	24	35	3	82	15	
Flagler	1				1			1						1	
Franklin	4	1	1		2					1	3		3	1	
Gadsden	19			13	6			1	1	5	11	1	8	11	
Gilchrist															
Glades	1				1						1			1	
Gulf	33			2	29	2			1	16	16		30	3	
Hamilton	50				46	4				27	21	2	49	1	
Hardee	10			4	6			4	1	4	1			10	
Hendry	5			2	3					3	2		1	4	
Hernando	7				6	1			2	2	3		1	6	
Highlands	24			6	17	1		3	2	10	9		6	18	
Hillsborough	201	9	10	48	128	6	6	40	50	42	62	7	135	66	
Holmes															
Indian River	22		1	6	13	2	1	4	3	2	12	1	5	17	
Jackson	12			1	11			2	3	5	2		6	6	
Jefferson	17				15	2			1	10	6		16	1	
Lafayette															
Lake	45	1		8	35	1	1	7	6	12	20		10	35	
Lee	68	1	1	3	59	4	1	2	9	30	26	1	52	16	
Leon	123	16	12	28	64	3	4	6	7	57	52	1	94	29	
Levy	3	1			2			1		2				3	
Liberty															
Madison	60	1		4	45	10		2	1	37	19	1	53	1	
Manatee	49			6	39	4		3	11	13	18	4	20	29	
Marion	187	5		14	158	10	2	1	2	98	86		164	23	
Martin	28	1	1	11	15		1	1	5	7	15		8	20	
Monroe	27			8	19			3	5	9	10		4	23	
Nassau	18	2	1	7	7	1		1	4	5	8		5	13	
Okaloosa	40			2	38					16	22	2	40		
Okeechobee	6			2	4					1	5			6	
Orange	528	3	3	64	426	32	3	17	25	258	219	9	404	124	
Osceola	11			1	9		1	3	2	3	3		2	9	
Palm Beach	179		2	42	128	7	7	20	34	62	61	2	35	144	
Pasco	22			7	14	1		3	1	9	9		4	18	
Pinellas	246	7	4	23	207	5	1	64	55	54	58	15	81	165	
Polk	126	7	2	33	79	5		14	17	49	43	3	26	100	
Putnam	144			9	123	12	4	5	7	74	55	3	112	32	
St. Johns	32	1		6	23	2		2	2	10	17	1	8	24	
St. Lucie	60	4	1	14	40	1	1	5	6	11	36	2	11	49	
Santa Rosa	10			3	7			2		3	3		9	1	
Sarasota	38	1	1	13	23			3	7	14	14		3	35	
Seminole	64	1	2	24	36	1		5	6	26	27		15	49	
Sumter	11			3	5	3	1		2	5	4		6	5	
Suwannee	70			8	58	4		2	2	37	27	2	64	6	
Taylor	16			4	11	1	1	1	2	2	10	1	3	13	
Union	3			2	1					3					
Volusia	282	4		35	215	28	1	25	22	106	123	6	165	117	
Wakulla															
Walton	18			5	12	1				7	11		17	1	
Washington	15			2	12	1				8	7		15		

VETERINARY PUBLIC HEALTH

JAMES E. SCATTERDAY, D.V.M., M.P.H.
Director

Veterinary public health is responsible for those activities related to the control of those animal diseases which are communicable to man. It participates in the planning, supervision and coordination of activities designed to eradicate or control the animal diseases which are transmitted to man either by contact or indirectly through food products of animal origin or by insect vectors.

During 1957, the division has concerned itself with the prevention and control of the following animal diseases:

Anthrax was not diagnosed in Florida this year; however, eleven specimens were submitted to the Veterinary Bacteriology Section of the Bureau of Laboratories by practicing veterinarians throughout the state for examination for possible anthrax. These specimens were examined and found negative.

Brucellosis—The Southeastern states' slogan "Brucellosis-free by 1960" may not come true in Florida, but major strides have been made. Starting in West Florida, fourteen counties have been certified as modified accredited for brucellosis. During the year, 264,495 cattle were brucellosis tested; 3015 brucellosis reactors were identified and removed, and 97,282 calves were vaccinated with the attenuated Strain 19 brucellosis vaccine.

More stringent regulations have been promulgated and adopted as to the importation of herd replacements, thus giving our herds (especially the dairies) better protection against reinfection from out of state.

Regulations were also adopted whereby swine herds may be tested and certified as brucellosis-free. There were 47 brucellosis infected swine herds reported during 1957.

A slight increase in the human cases, over previous years, was noted with seventeen reported during 1957.

Bovine Tuberculosis showed a marked increase due to an outbreak in nine of the larger dairies within the concentrated dairy section of South Florida. Two thousand five hundred and fifty six (2556) herds, consisting of 147,098 cattle, were tuberculin tested and 485 cattle on 15 premises were found infected and removed.

Eastern Equine Encephalomyelitis — 386 cases in both horses and mules were reported during the year. These were widely scattered throughout the state with the heaviest infection being found in those areas where there are numerous lakes and slow moving streams and where there is a large horse population. The vaccination of equines is advocated and promoted annually through publicity by the county health departments prior to the mosquito season.

A survey of the bird and mosquito populations was attempted in the infected areas of the state. Approximately 150 birds of all species were collected, however, no virus recoveries were made. Quite a number of mosquitoes were taken by means of light traps and examined for encephalomyelitis, but these also gave no virus recovery.

Two human cases of Eastern Equine Encephalomyelitis were reported during 1957, both of which were confirmed by laboratory diagnosis.

Leptospirosis is of major importance to our dairies due to the loss of milk by suppressed production and from abortions. It is also of much concern to our pet owners as the mortality is quite high in dogs. Five hundred and ninety six (596) cattle, 498 dogs, 44 other animals, and two humans were diagnosed and laboratory confirmed positive for leptospirosis during the year.

Mycotic Infections — Ringworm was reported in 148 dogs, 42 cats and 41 other animals of various species. Human cases are not reported, but numerous infections were observed by the county health departments. Many veterinarians report family infections which they observe at the time the pets are presented for treatment.

Miscellaneous — Some of the less common diseases which have been observed during the year are: *Pseudo-rabies* or Aujeszky's Disease; *brucellosis in the horse*; *histoplasmosis*; *listeriosis*; *vibriosis* and *trichomoniasis*. The latter two are of importance as they complicate the breeding programs in our dairy herds. The Veterinary Bacteriology Section of the Bureau of Laboratories has done an excellent job of aiding the practicing veterinarians of the state in the diagnoses of these diseases.

Rabies shows an increase over last year. One hundred and twenty two cases in eight species of animals were laboratory confirmed in 1957. It is of interest to note (Table 29) that 65 of the 122 reported for the year were in Leon County alone. This was a rather explosive outbreak which started in the fox population and spilled over into the dog population. It started the first of the year and lasted for approximately three and one-half months.

Dog rabies, during the year, has been materially reduced by vaccination of owned dogs and control of strays. Some sections of the state have done better than others due to the fact they have county and municipal laws which require that this be done.

Our major rabies problem during 1957 was one of wildlife, with 73 foxes, seven raccoons, two skunks and seven bats being laboratory confirmed. Most of the dog rabies was due to exposure to rabid foxes and raccoons and occurred in those epidemic areas in the state. Trapping programs were promoted but met with little citizen interest. A full-time biologist, employed with this division, worked during the year on wildlife census counts which enabled him to predict possible epidemics. He works in cooperation with the Florida Game and Fresh Water Fish Commission

and can and will train interested landowners in trapping procedures. A summary of his activities appears at the conclusion of this report.

In 1957, the State Board of Health furnished 542 complete human antirabies treatments of the Semple or brain tissue vaccine; eight complete treatments of the duck embryo rabies vaccine; and 101 vials (10cc) of the rabies hyperimmune serum. This appears to be a somewhat excessive use of antirabic treatment since only 20 persons were bitten by known rabid animals. Of these twenty people six were exposed to rabid cats and six to rabid foxes. Five were exposed to dogs, and one each to horses, cattle, and skunks known to have been infected with rabies.

The cumulative totals for the animal diseases reported by practicing veterinarians with the state are found in Table 30. The participation in this Animal Morbidity Reporting program has increased steadily since its introduction in 1954. Much information is gained through these reports by this division, the practicing veterinarians and the state and federal control personnel in that they pinpoint the location of various diseases throughout the state, thus enabling all to take the necessary precautionary measures.

BIOLOGIST'S REPORT

WILLIAM L. JENNINGS, M.Sc.

Wildlife rabies again consumed almost all of the biologist's time. During the year technical aid was rendered to five counties which were subjected to rabies epizootics in foxes.

The bat survey, which showed that insectivorous bats are infected with rabies throughout Florida and may be a reservoir for the disease in other wildlife species, was completed. These findings were supported by field observations which again indicate that more and more frequent contacts occur between wildlife and some inapparent reservoir. Wildlife rabies appears to be a permanent threat which requires constant control with little likelihood of completely eradicating it from the state.

Cyclic recurrences of the disease in wildlife during periods of abundance appear to be predictable and careful studies were made, especially where foxes and raccoons were involved. Sufficient data were gathered on the rate of spread of rabies through populations, effectiveness of various barriers and favorable environments to support a reasonably accurate prediction of time of appearance, severity and area affected by an explosive rabies epizootic, at least in foxes.

Intensive studies of the epidemiology in raccoon populations, which are necessary to permit a similar understanding of rabies in this animal were continued. Our data now show that rabies in raccoons is recorded from areas with rather narrow and well-defined geographic limits.

A number of rabid wild animals occurred singly and without apparent relationship in time or space. These continue to suggest repeated

TABLE 29

COUNTY & MONTH	Dog	Cat	Cattle	Horse	Fox	Raccoon	Skunk	Bat	TOTAL
TOTALS	17	9	6	1	73	7	2	7	122
Bradford	..	1	..	..	..	..	..	..	1
Broward	1	..	..	..	..	..	..	..	1
Charlotte	..	..	..	..	..	1	1	1	2
Citrus	..	..	..	..	..	..	..	..	1
Columbia	..	..	..	..	..	1	1	..	1
Dade	..	1	..	..	..	..	..	5	6
Duval	..	1	..	..	..	..	..	..	1
Escambia	..	..	..	..	5	..	..	..	5
Gadsden	..	..	..	..	..	1	..	..	1
Hernando	..	..	..	..	..	..	..	..	2
Highlands	2	..	..	..	1	..	..	..	1
Jackson	..	..	1	1	6	..	..	..	9
Jefferson	1	..	..	..	3	..	..	..	3
Lafayette	..	..	..	..	..	3	..	..	3
Lee	..	..	4	..	48	..	..	..	65
Leon	9	4	1	..	5	..	..	..	6
Madison	..	..	..	..	2	..	..	..	2
Marion	..	1	..	..	..	..	..	..	2
Orange	1	..	..	..	..	..	..	..	1
Palm Beach	1	..	..	..	1	..	..	..	2
Polk	1	..	..	..	..	1	..	..	1
St. Lucie	..	..	..	..	..	..	..	1	1
Sumter	..	..	..	..	..	..	..	..	..
Volusia	1	..	..	..	..	..	..	..	1
Wakulla	..	1	..	..	2	..	..	..	3
MONTH	17	9	6	1	73	7	2	7	122
January	3	..	..	..	9	1	..	..	13
February	1	..	..	..	14	1	1	..	17
March	5	1	1	..	16	..	..	1	24
April	2	1	2	1	11	1	..	..	18
May	1	..	3	..	12	..	..	..	16
June	1	..	..	..	1	1	..	..	3
July	..	1	..	..	3	..	..	..	4
August	..	1	..	..	1	..	..	5	7
September	1	1	..	..	..	1	..	1	4
October	1	1	..	..	..	..	..	..	3
November	..	1	..	..	1	1	..	..	3
December	2	2	..	..	4	1	1	..	10

COUNTIES	Anaplasmosis			Anthrax		Brucellosis Swine	Encephalo., Equine	Hog Cholera	Infectious Anemia, Equine	John's Dis.	Leptospirosis			Malig. Edema	Newcastle Dis.	Psittacosis	Rabies				Erysipelas Swine	Vesicular Exanthema	Ringworm		
	Cattle	Other	Blackleg	Cattle	Dogs						Other	Dogs	Other				Dogs	Foxes	Cattle	Other			Dog	Cat	Other
TOTAL	385	0	0	145	47	386	662	28	5	596	498	44	20	0	0	22	68	13	26	204	0	148	42	41	
Alachua	2			4		9	1		2	2															
Albermarle	4					2	3				55							1			26				
Alford						6						3									1				
Alford	13			3		4			1	61	3		1								19	4	8		
Alhambra				2		3					12														
Charlotte	1			1		3	1											2	1						
Citrus						6																			
Clay				2	4	9	50			4	5							1					5		
Collier				1		7			2	8	157	1										33	8		
Columbia	6					12																			
Dade	4					13	143			31	49	8													
DeSoto	4			5	1	13					22	9													
Dixie				5																					
Duval	4																								
Escambia																									
Flagler																									
Franklin				8		4	23				24														
Gadsden				1		7																			
Greene	16					3	5		2																
Hamilton				5		3																			
Hardee	29			7		11																			
Hendry	99					2																			
Hernando						3					1	1													
Hill	14			5		8				1	4	17	6	1		2			100		21				
Hillsborough	3																								

MILK SANITATION ACTIVITIES

SAMUEL O. NOLES
LEWIS W. WILLIS
State Milk Consultants

During the year an educational campaign was instigated by the milk sanitation section of Veterinary Public Health to eliminate the presence of antibiotics from market milk. Through excellent cooperation of personnel in our state laboratories, county health departments and from the industry, the presence of these drugs has been drastically reduced. However, more work still remains to be done in order to eliminate this problem.

Shifting of dairies from the urban to the more rural counties increased considerably during the year. This added burden to sanitarians in these rural counties is presenting several problems which must be overcome. An increased amount of time and mileage for supervision of new construction, operation, and sample collection will be necessary. More time by the milk consultants must also be devoted to working with the sanitarians who are less familiar with the milk sanitation control programs.

Four milk sheds were surveyed by the two milk consultants. These surveys resulted in considerable improvements in compliance by dairies and milk plants with better production and processing methods.

Modern methods of milk production and hauling are erasing "local" milk sheds. Milk is being moved daily by tank trucks to plants as far away as 250 miles from the plants in which it is being processed. Processed milk also is being sold to more distant communities. These developments create a greater need for uniformity of control programs and for more accurate exchange of information between control officials of the various areas. The milk consultants continue to devote considerable time and effort to accomplishment of the first of these two objectives. The Central Milk Registry occupies an important role in the latter.

Other items which have required attention throughout the year are (1) keeping check on quality of milk shipped into the state, (2) approval of supplies for military and interstate use, (3) checking new equipment and (4) furnishing information on new developments to sanitarians in state.

In spite of all these problems, progress is being realized in the better production and processing of milk and milk products. Greater interest in control programs with resultant calls for the services of the milk consultants indicates a continued need for additional personnel. Cooperation between various control officials and industry are resulting in better working relationships. Both this division and the dairy industry are very proud of the fact that no recorded outbreaks of disease were attributed to milk within the state during 1957.

The following figures indicate a portion of the activities of the milk consultants during the year:

Visits to Counties	60
Dairy Farm Inspections	587
Processing Plant Inspections	88
Ice Cream Plant Inspections	10
Dairy Farm Plans Reviewed	24
Milk Plant Plans Reviewed	5
Sanitarian Trainee Short Courses Conducted	3
Industry and Regulatory Meetings Attended	
(a) State	14
(b) National	3

BUREAU OF LABORATORIES

NATHAN J. SCHNEIDER, Ph.D.
Acting Director

ORGANIZATION AND PERSONNEL

Development of physical facilities continued in this bureau. Construction of new regional laboratories in Miami and Orlando were begun during the latter half of 1957. The Miami laboratory provides for approximately 5000 square feet of floor space which is arranged to accommodate the diagnostic laboratories, modest space for limited special studies, and offices for the regional inspector of the Bureau of Narcotics. The laboratory is being built in proximity to the Jackson Memorial Medical Center and is part of the Dade County Health Unit, thus bringing together interrelated state and county medical facilities in the Dade County area. The regional laboratory in Orlando provides approximately 5000 square feet of floor space, one-half of which is designed for regional diagnostic laboratory services and the remainder to be occupied by the Bureau of Engineering and Division of Industrial Hygiene. The latter will utilize these laboratory facilities for stream and air pollution services, including radiobiological activities. Several wooden buildings now being occupied by the regional laboratory will be maintained and utilized as a supplementary service space when the new laboratory is completed.

Elsewhere, minor but important arrangements for additional laboratory facilities were provided. In Miami, suitable laboratory facilities for the bacteriological examination of tuberculosis were developed jointly by Dr. Warren Hoffert and Dr. Eugene Flipse in space provided in the Chest Unit of Jackson Memorial Hospital. Operation of this laboratory began in May and has averaged approximately 850 examinations per month for the past five months of operation. Specimens are being received from the Dade County areas including the Jackson Memorial Chest Unit. This laboratory will continue its service as a Board of Health function until the new regional laboratory is ready for occupancy. In Lantana, some relief was provided for the overcrowded combined public health and hospital laboratory facilities in the Southeast Florida Tuberculosis Hospital by expanding into an adjoining room. In Jacksonville, a small room which is located on the roof of the present laboratory building was refitted to serve as animal quarters for a small monkey colony. This change made it possible to carry on special studies requiring monkeys for the research grant from the National Foundation for Infantile Paralysis.

The cooperative program in the laboratory field established in November 1955, with the State Tuberculosis Board and its four hospitals, has been developed with gratifying success. Laboratory supplies used commonly in both hospital and public health laboratories are being purchased through the State Board of Health supply channels, resulting

in the saving of thousands of dollars because this permits larger quantity discounts. Further, the State Board of Health is preparing and supplying costly tuberculosis media for use by the State Tuberculosis Board hospitals at a fraction of the cost if purchased from commercial sources. More important, a high level of diagnostic services are being provided to the tuberculosis hospitals.

The laboratory staff has remained relatively stable during 1957. Most noteworthy was the change in directorship of the bureau. Dr. Albert V. Hardy, who has been director since March 1946, began a year's leave of absence in October to become assistant state health officer with primary duties as "Coordinator of Research" and "Program Planning." Although Dr. Hardy has relinquished the responsibility of the day-to-day directorship of the bureau, his presence is still felt. Dr. N. J. Schneider, formerly assistant director, was named acting director.

The staff was strengthened during the year by the return in September of Arthur L. Lewis, D.V.M., from a year of study at the University of Minnesota School of Public Health. He assumed the duty of Chief of the Virology and Veterinary Public Health Diagnostic Section in the Central Laboratory. Wellington Moore, D.V.M., on assignment from the Veterinary Public Health Division of the U.S. Public Health Service was recalled for assignment elsewhere. His replacement, Jim McQueen, D.V.M., reported late in December.

DIAGNOSTIC SERVICES

The same types of diagnostic services were made available in 1957 as in the preceding years. Table 31 shows the total examinations performed by laboratories for 1957. There were 2,629,425 examinations made on 1,238,382 specimens submitted to the bureau. Comparison of numbers of examinations with those for 1956 would indicate a decrease of 23,766. However, this decrease is more apparent than real. Adjustments made in the counting of examinations resulted in a disproportionate decrease in the number of examinations performed in the West Palm Beach Regional Laboratory as compared to the decrease in its specimen load. The number of specimens examined in that laboratory decreased from 86,855 in 1956 to 71,588 in 1957, while the total statistics for examinations decreased from 233,890 to 130,993 for the respective years. Overall the diagnostic services grew in the Bureau of Laboratories more than the figures in Table 32 indicate. The laboratory work on special studies was curtailed in 1957, this tending to reduce the total specimens tested and examinations performed. Considering only the general public health diagnostic laboratory services, in the year under review, 14,199 more specimens were received than in the preceding year. The increases in the bureau were chiefly in syphilis serology, smears for gonorrhea, enteric cultures, sanitary bacteriology, veterinary public health diagnostic services, virology and miscellaneous bacteriology. There were moderate decreases in the number of agglutinations for febrile diseases, blood cultures, water pollution surveys, utensil examinations. Continued increases in examinations were recorded in all of the regional

laboratories except in West Palm Beach. Here again, the decrease in work load is more apparent than real. Until 1957, public health and tuberculosis hospital specimens were reported together insofar as tuberculosis examinations were concerned. In 1957, records for these specimens were kept separate and are reported separately in this review. (See Table 35 which is discussed later in this report.) The shifting of public health tuberculosis diagnostic specimens from the West Palm Beach Laboratory to the Miami Regional Laboratory accounts for a portion of the decrease in West Palm Beach.

The results of examinations are shown in Table 33. During 1957, the number of specimens submitted for serologic tests for syphilis was 733,411, representing an increase of 14,450. As was the case last year, the laboratory activity in syphilis serology in 1956 was associated largely with vigorous case-finding programs. The proportion of all specimens found reactive continued the downward trend. This proportion dropped progressively from 16.6 per cent in 1950, to 8.0 per cent in 1954, and 5.2 per cent in 1957. These observations emphasize the urgent importance of continuing vigorous case-finding and control measures.

A total of 301 serum specimens were submitted for *Treponema pallidum* tests as compared with 190 in 1956, 115 in 1955 and only 17 in 1954. These were referred to the Venereal Disease Research Laboratory of the U. S. Public Health Service. Examinations were done by the TPCF (*Treponema pallidum* complement fixation) tests and TPI (*Treponema pallidum* immobilization). Specimens were examined first by the TPCF, those found reactive or weakly reactive were tested by the TPI procedure. By the former procedure, 133 or 48.4 per cent were reactive and 31 or 11.3 per cent were weakly reactive. One hundred and eleven or 40.4 per cent were nonreactive. Thirty-six specimens did not yield satisfactory results. When tested by the TPI procedure, the 164 TPCF reactive and weakly reactive specimens gave 130 reactive (79.3 per cent), 5 weakly reactive (3.0 per cent), 27 nonreactive (16.5 per cent) and 2 (1.2 per cent) inconclusive results. No comparison can be made with the results of specimens submitted in 1956 since the conditions for testing were different. However, it seems highly significant that the search for a more specific laboratory test for syphilis utilizing *Treponema pallidum* organisms as the test antigen continues and as might be expected results must be interpreted carefully with full understanding of the meaning and limitations of the newer procedures. The TPCF test appears to have more promise as a diagnostic tool but as in virology, it may require testing paired serum specimens taken several months or even more than a year apart in order to rule out a biologic false positive.

The number of specimens submitted for "febrile agglutination tests" continued its annual decline. It appears that a more critical selection of specimens submitted for agglutination tests was used. Comparisons of positive findings in 1957 cannot be made with those of previous years because a more critical criterion for positive findings was established at the beginning of 1957. For example, in previous years all sera having

a titer of 1:40 or greater against typhoid was counted as positive. This resulted in a report of 10.1 per cent positive findings in 1956. In contrast, in 1957, all sera having a titer of 1:160 or greater against typhoid was considered positive; which change resulted in a yield of 1.7 per cent positive findings for typhoid. Widespread immunization with typhoid vaccine has produced a population which has a relatively high antibody level against typhoid, and it became necessary to raise the antibody titer level for calling a typhoid serum positive. Serologic evidence of a current infection should be based on the demonstration of a four-fold rise in antibody titer in two paired sera taken from the patient, one during the acute febrile stage of illness and the second during the convalescent phase. However, specimens are tested singly and it is left to the discretion of the physician to submit follow-up specimens.

There appeared to be a large increase in the number of diphtheria positive specimens submitted for examination. Specimens positive for *C. diphtheria* numbered 112 in 1954, 141 in 1955, 150 in 1956 and 307 in the year under review. There was a decrease in the number of throat specimens; more specimens positive for streptococci; and a slight increase in other potential pathogenic bacteria positives such as the *pneumococci* and *Hemophili*. In diphtheria, it appears that more vigorous case finding (especially healthy carriers) have contributed greatly to the increased number of positives found.

The total number of tuberculosis specimens reported to have been examined in 1956 was 48,411. This included specimens examined in the Jacksonville and West Palm Beach Laboratories. Since the latter is a combined hospital and public health unit, totals included some specimens which were hospital specimens. For the first time in 1957, figures are available for public health specimens as separate from hospital statistics. Thus no good comparison can be made between the total specimens examined during the year under review and previous years. Suffice it to say that 40,649 specimens were received in the public health laboratory for tuberculosis examinations and 70,399 in the Tuberculosis Hospital Laboratories. Thus a total of over 110,000 were examined in all. Considering public health specimens only, 7.8 per cent of all satisfactory specimens were positive for tuberculosis, while 7.9 per cent of the sputum, 6.9 per cent of the gastrics and 4.2 per cent of all other types of specimens were positive. In Table 29, 1956 Annual Report, evidence indicated a progressive decline annually in percentage positive of tuberculosis specimens examined from 1950 through 1955, and a slight leveling off in 1956. In the year under review, this decline continued the same trend as was noted prior to 1956. Cultural techniques in 1957 were as sensitive as in previous years, hence it would appear that the reservoir of infection in Florida is slowly being reduced. With this trend, case-finding will become more expensive for each new case uncovered.

Specimens submitted for the diagnosis of gonorrhea continued at a high level. There was no marked difference in the proportion of positive specimens as compared to the three preceding years.

The number of fecal specimens examined for enteric pathogens increased slightly over the preceding year. There were 100 isolations of *S. typhosa* and 28 *Shigella* in 1957 as compared to 120 *S. typhosa* and 60 *Shigella* in 1956. In contrast, in 1957 there was a small increase in the number of *Salmonella* (other than *S. typhosa*) in 1957 as compared to the preceding year.

In the field of sanitary bacteriology, the number of samples of dairy products examined did not change significantly. There was a slight increase in the number of drinking water samples and a substantial increase in foods, including shell fish tested. Water pollution survey samples declined in number during the year as did also the number of utensil swab samples.

In parasitology, the heavy volume of work load continued as in preceding years. The high proportion of positives for hookworm, ascaris, enterobius and other intestinal parasites was found as in 1956. There was only one positive finding for malaria as compared to six in 1956.

There was no substantial change in the chemistry laboratory during the year under review. A small decrease in the number of blood specimens examined for diabetes was noted.

A decline in the number of public health veterinary diagnostic specimens observed in 1956 was interrupted in 1957. During 1955 a total of 3433 specimens were received; this dropped to 1360 in 1956 but increased to 1929 for 1957. Much of this increase was accounted for in specimens for psittacosis and leptospirosis in animals.

Diagnostic services for viral and rickettsial infections continued its rapid growth in 1957. Exclusive of rabies, a total of 5053 specimens were submitted in 1957 as compared to 3004 in 1956. Table 34 presents the findings by patient for these diseases for 1956 and 1957. Positive diagnostic findings by patient were found for mumps, eastern equine encephalomyelitis, poliomyelitis, and influenza A and B for both years. Other diseases encountered were associated with coxsackie ECHO (entero cytopathogenic human orphan) and adenoviruses. There was a decrease in the number of mumps positive in 1957 as compared to 1956. In contrast, there was a substantial increase in positive findings for types 2 and 3 poliomyelitis and influenza A infections. Results of laboratory investigation of reported cases of polio occurring in vaccinated children in Florida in 1957, indicate that of 38 cases studied 12 (31.6 per cent) were confirmed in the laboratory. Considering their clinical status, 2 of 8 paralytic, 8 of 23 nonparalytic and 2 of 7 unspecified status were confirmed by laboratory diagnosis.

The outbreak of asian influenza in Florida was reflected by the increase in the increased proportion of positive cases for influenza A in 1957 as compared to 1956. Since influenza is fairly readily diagnosed clinically, the role of the laboratory in such infections is merely to determine the serologic type of influenza present in the area. Hence, the

number of specimens tested represented a small proportion of the total infections present in any one area at a particular time.

The number of animals examined for rabies (Table 33) increased over the preceding year. An outbreak of fox rabies in Northwest Florida accounted for a substantial part of the increased numbers of positive animals.

Fewer diagnostic specimens were referred to the Communicable Disease Center laboratories of the Public Health Service in 1957. A total of 242 were submitted as compared to 666 in 1956. In part, this decrease is associated with the broadening of viral diagnostic services made available in the state laboratories.

For the first time, since this bureau assumed technical responsibility for the laboratories operated by the State Tuberculosis Board in their hospitals, data are available as to the work performed. The number and types of examinations for the year under review are presented in Table 35. There are four hospital laboratories located in Tampa, Orlando, Lantana and Tallahassee. The latter two serve as combined regional public health and hospital laboratories. The remaining two are units of the hospital only. The variation in total examinations follows very closely the patient load in each hospital. Individual differences in types of tests performed reflect in part, the requests for services from the medical staff, a total of 70,399 examinations were made for tuberculosis by smear and cultures. Periodically, tuberculosis cultures isolated from patients under drug therapy are tested for drug susceptibility. This provides the attending physician with continuing data as to the changes in drug sensitivities of the tubercle bacilla while the patient is under treatment. Other test procedures are those commonly found in any good hospital laboratory.

SPECIAL STUDIES

The bureau has continued its program of special studies during the period under review. Tables 32 and 33 list the wide variety of special projects with which the bureau was concerned in 1957. Funds provided from outside sources to support these studies totalled approximately \$55,000. This represents a decrease in the amount available for the preceding year and is due to the extension of the U. S. Air Force School of Aviation Medicine contract for one year without additional funds and a short interruption of a Public Health Service grant.

Human salmonellosis studies were limited primarily to providing service as a *Salmonella* typing center for the state. A total of 412 specimens, approximately the same number as in the preceding year, were typed for epidemiological purposes. This work was supported by the Armed Forces Epidemiological Board (AFEB) and state funds.

Bacteriological and viral studies in monkeys were supported by grants from the National Foundation for Infantile Paralysis (NFIP) and the

AFEB. With the use of tissue culture methods, tissues derived from moribund animals were examined for the presence of viral agents. They were found to be widespread in the intestinal tract, kidney and spleen, but for some unexplained reason, virus was absent from the liver.

In an effort to determine the pathogenesis of monkey viruses in association with *Shigella* as a cause of diarrheal disease, studies were initiated at Okatie Farms, South Carolina (the NFIP monkey conditioning center). However, facilities for maintaining proper isolation of animals were found to be unsatisfactory and required another site. As a result, a small monkey colony was established in the Board of Health laboratory in Jacksonville. By the end of 1957, a group of monkeys were being conditioned for use for feeding experiments (*Shigella*-virus mixtures). In another activity, the tissue culture processing laboratory which is operated by the NFIP at their monkey conditioning farm in South Carolina continued a successful year in salvaging kidney tissue from moribund monkeys. The acting director of the bureau gave technical assistance and direction to this laboratory.

Studies supported by the U. S. Air Force School of Aviation Medicine continued during the year. Rapid antibiotic sensitivity procedures, particularly with the *Hemophilus* group of organisms, were studied. A rapid urea test for screening out *Proteus* organisms normally found in enteric cultures was evolved and its evaluation initiated. Research in the cultural diagnosis of *M. tuberculosis* was continued in Jacksonville. In the 1956 Annual Report, mention was made that three culture media (Lowenstein-Jensen, Penicillin Blood Agar and American Trudeau Society) were compared and found to be equally efficacious. Three additional (Peizer Egg Yolk, Middlebrook 7H9 and Peizer Serum Agar) media were compared during the period under review. Results are not available yet. This work was performed under the direction and supervision of Miss Mildred Jefferies, Senior Bacteriologist in the Jacksonville laboratory.

Traditionally, in diagnostic microbiology, the acid-fast bacilli have been classified as either pathogens or saprophytes. However, in recent years, there have been increasing reports of cases of pulmonary disease yielding acid-fast bacilli with characteristics neither entirely typical of the known pathogens nor of the rapidly growing saprophytes. This group of unclassified bacilli have been described as atypical acid-fast bacilli. The cooperative arrangement between the laboratories of the State Board of Health and the State Tuberculosis Board provided increased facilities and opportunities for research in problems of concern to both agencies. Outstanding among these problems was the need for an intensive study of the bacteriology, epidemiology and the clinical aspects of these infections. The study was inaugurated in the Southwest Florida Tuberculosis Hospital and to date atypical acid-fast bacilli have been isolated from 106 individuals in Florida with pulmonary disease. During 1956-1957, in the tuberculosis section of the Jacksonville laboratory, 0.8 per cent of the positive observations for acid-fast bacilli were atypical organisms. Since the usual observations of acid-fast bacilli on

culture are not adequate to readily identify the atypical organisms, several supplementary tests are required. Important among these are the catalase test, cording phenomenon, drug susceptibility, animal virulence and growth in tissue culture. Most of the strains tested are highly positive for catalase, and they do not form cords. With the in vitro drug susceptibility test the majority of the strains tested are resistant to PAS and INAH but are somewhat susceptible to streptomycin. Virulence tests in the guinea pig were done on 73 of the strains. All failed to produce generalized infection or progressive disease in these animals. Growth of 24 of the strains were studied in HeLa cell tissue cultures. This procedure was newly developed and required extensive work in adapting it for use in our laboratory. *M. tuberculosis* forms cord-like growth in the HeLa cells, the atypical strains grew without this characteristic formation. Epidemiological studies were completed on about one-half of the hospitalized cases. The results show that 67.4 per cent of these infections are selective for white males in the older age groups. The most striking factor was the relative rarity of atypical acid-fast bacilli in colored patients. There were no clinical findings to differentiate from infections due to *M. tuberculosis*. The most striking feature was the lack of favorable response to the standard anti-tuberculous drug therapy. This study was supported by the Air Force School of Aviation Medicine grant and by funds provided by the State Tuberculosis Board and the State Board of Health.

Further studies in tuberculosis were performed in Miami in cooperation with the Chest Unit, University of Miami School of Medicine. Studies were initiated to compare the efficacy of culturing specimens obtained by gastric lavage with those obtained from the nasopharyngeal region using a special aerosol spray technique. This study was supported by a U. S. Public Health Service grant obtained by the University of Miami.

Rabies in Florida continued to receive the attention of the laboratory and the Division of Veterinary Public Health. Investigation of rabies in bats as reported in the preceding annual report was extended to include other wild animals in an effort to obtain information as to their epidemiological relationship. Particular emphasis was given to rabies in foxes and raccoons. The USPHS grant supporting these studies was renewed for an additional three years.

Streptococcus grouping and typing service was continued. A total of 860 strains of streptococci were tested. Occasional strains which could not be typed with antisera available in the Jacksonville laboratory were referred to CDC in Atlanta for further studies. This activity was supported by State Board of Health funds.

Studies to evaluate the efficacy of adenovirus vaccine were performed. Specimens taken in 1956 were examined serologically by the complement fixation test in Jacksonville. These specimens were also referred to the laboratory of a commercial firm which supplies adenovirus in order to

determine neutralizing antibody titers. Results of these neutralization tests have not been received.

As part of a surveillance program, the virus diagnostic laboratory cooperated with the USPHS in providing diagnostic tests for poliomyelitis and influenza. Supplemental funds to cover the cost of this program was provided on a contract basis by the federal government. Results of this work were discussed previously in this report.

As part of the AFEB research grant, special studies were carried out to evaluate several culture media used in enteric bacteriology. These included KCN and Ninhydrin procedures to differentiate *Salmonella* from the *E. freundii*-*Bethesda Ballerup* group, and the use of Christensen citrate media with *Shigella* and related organisms. Information obtained has resulted in the incorporation of KCN, Ninhydrin and Christensen citrate in the routine procedures for enteric bacteriology.

Bacteriophage typing of staphylococci studies were initiated during 1957. This procedure is useful in typing strains of staphylococci associated with food poisoning and staphylococcal infections. Staphylococci are ubiquitous in nature and therefore information as to related strain(s) involved is of epidemiological importance. Cultural tests are not definitive in differentiating strains of staphylococci. Serologic procedures are not available. Studies during the year were limited to setting up and obtaining a working knowledge of the procedure. The phages and corresponding strains of staphylococci were obtained from the laboratory of Dr. John E. Blair, Hospital of Joint Diseases, New York City. The bacteriophage typing procedure was used successfully in studying several food poisoning outbreaks and in a staphylococcus skin infection episode which occurred in the nursery of a hospital. Before this service will be ready to be offered statewide, a supply of the bacteriophage will need to be prepared. This requires the propagation of 26 different staphylococcal bacteriophages. It is planned to carry this forward in 1958. The bureau will then be ready to cooperate with the American Public Health Association as a typing center for Florida, Cuba, Puerto Rico and the Virgin Islands. It is planned to limit this service to epidemiological situations, i.e., where cultures of staphylococci have been isolated from related cases of infection and/or from foods suspected of causing poisoning, etc.

Studies to determine the presence of growth inhibitors in milk were completed resulting in the incorporation of this test as a part of the regular service offered by the Sanitary Bacteriology Section of the laboratory. Its use has been extended to the regional laboratories.

CONSULTATIVE AND EDUCATIONAL SERVICES

Medical technology workshops were again conducted in Jacksonville and Miami. In Jacksonville, separate courses were offered in special fields of microbiology and mycology while in Miami similar courses were offered in hematology and parasitology. The staff was composed

of specialists from the Communicable Disease Center, U. S. Public Health Service, and the University of Miami. Members of the state laboratory staff assisted in presenting the workshops. Students were drawn from among the state laboratory technical workers and laboratory personnel from private and hospital laboratories throughout Florida. The enrollment totalled 74. Costs of these workshops were borne in part by tuition collected from each student and by funds collected as annual renewal fees from licensed technologists. The bureau contributed supplies and employee time and travel.

The bureau served as a source of both educational assistance and consultative guidance on the latest laboratory technical procedures. A total of nine medical technologists spent from one day to two weeks in our laboratories for special instruction or refresher training. The bureau provided special laboratory training to two foreign medical scientists, sponsored by the federal government as part of the WHO and ICA activities. One medical technologist who was formerly engaged in laboratory work in Florida and now in charge of a hospital laboratory in Colombia, South America, spent three weeks in the Jacksonville laboratory for refresher training in public health laboratory procedures. Medical and biological science college students were employed on a part-time basis during the summer, thus providing them with opportunities to gain valuable knowledge in public health laboratory procedures.

Technical education was made available through the scientific program of the annual meeting of the Florida Society of Medical Technologists (FSMT). Miss Carolyn Roth, Executive Secretary, provided much assistance in program planning and in the management of the meeting. The Tenth Annual Meeting of the FSMT held in Orlando was attended by over 200 Florida medical technologists. Four issues of the "Electro Lyte" a professional and technical newspaper, edited by Miss Minnie Schreiber, were published under sponsorship of the FSMT. Information concerning the latest technical procedures written by specialists was thus given wide distribution among the medical technologists in the state.

Visits to private and hospital laboratories for consultative purposes was available on a limited basis. This bureau has specific responsibilities to 47 private clinical laboratories registered with the State Board of Health and 190 laboratories (including federal and state) which are approved for premarital and prenatal syphilis serology. In addition, visits were made to the regional laboratories with the bureau and to approximately one-third of the county health departments.

Effective July 1957, the Board of Health assumed administrative responsibility for maintaining records and collection of licensing fees for Medical Technologists and Medical Technologists Directors as provided for in chapter 483, Florida Statutes, 1955. There were 435 licensed medical technologists and 109 licensed medical technologist directors.

Consultative services were provided in the field of sanitary bacteriology by Mr. Hugh Butner. Technical assistance and guidance was given to the Pinellas and Volusia County Health Department laboratories. Three commercial dairy plant laboratories and one regional laboratory within the bureau were certified to perform tests on milk and dairy products in accordance with Standard Methods, and the USPHS. Active participation in two short courses for sanitarians and milk laboratory technicians were engaged in during 1957. The bureau has worked closely with the Division of Veterinary Public Health to raise the level of tests in private dairy laboratories and in so doing have established a friendly relationship whereby these laboratories seek our technical assistance without any hesitation.

For check testing purposes and in order to evaluate technical procedures unknown specimens have been sent to laboratories within the state and in turn, to check our own performance, we have obtained unknowns from the Communicable Disease Center Laboratories in Chamblee, Georgia. The number of state laboratories sent serology evaluation specimens has increased from 142 in 1954, 164 in 1955, 184 in 1956 to 194 during the year under review. A total of 6500 serology unknown specimens were distributed during 1957. Revisions of the previously published list of laboratories approved for premarital and prenatal serology is appended as part of this report; 11 laboratories have been added to the approved list and three have been removed. The Central laboratory participated in the national serology evaluation series which was conducted by the Venereal Disease Research Laboratory of the USPHS.

The bureau has received and examined successfully unknown specimens for tuberculosis, bacteriology, mycology, and virology (poliomyelitis and influenza) sent from the Chamblee laboratories. This service provides the bureau with an opportunity to evaluate the efficiency of our technical procedures.

The staff of the bureau was stimulated and strengthened by attendance at a number of out-of-state courses of training.

Articles by staff members:

Schneider, N. J., Scatterday, J. E., Lewis, A. L., Jennings, W. L., Venters, H. E. and Hardy, A. V. Rabies in bats in Florida. *Am.J.Pub. Health*, 47:983-989, Aug. 1957.

Kamm, M., Schreiber, M., Schneider, N. J., Hardy, A. V. Evaluation of a modified KCN medium. *Bacteriological Proceedings, Society of American Bacteriologists*, 1957.

Schreiber, M., Pierce, W., Schneider, N. J., Hardy, A. V. and Mitchell, R. B. Studies on a triple sugar iron urea agar and evaluation of Christensen agar. *Bacteriological Proceedings, Society of American Bacteriologists*, 1957.

* * * *

Revision as of January 1, 1957, of Previously Published List of Laboratories Approved for Premarital and Prenatal Serology —

REMOVED

Coconut Grove Clinic, 3405 Main Highway, Coconut Grove
West Orange Memorial Hospital, Winter Garden
Dr. M. A. Collier, 1016 N. Main Street, Wauchula

ADDED

Flagler Hospital Laboratory, St. Augustine
Bradford County Hospital Laboratory, P. O. Box 1071, Starke
West Orange Medical Laboratory, 9 W. Plant Street, Winter Garden
Winter Haven Hospital Laboratory, Winter Haven
Dr. Edward Blum, 7210 Red Road, S. Miami
Joseph Von Thron, M.D., 25 N. Orlando Avenue, Cocoa Beach
Dr. J. M. Houston, 727 41st Street, Miami Beach
Leon County Blood Bank, Tallahassee
Drs. Gessler, Griffith and Parks, 635 1st Street, Winter Haven
Singer Clinical Laboratory #2, 405 Huntington Building, Miami
Wauchula Infirmary, Wauchula
Everglades Memorial Hospital Laboratory, Pahokee
Hendry County Hospital Laboratory, Clewiston
Seaboard Medical Clinic, 2186 N. W. 7th Avenue, Miami
Fort Lauderdale Beach Hospital Laboratory, 125 North Birch Road, Ft. Lauderdale
South Lake Memorial Hospital Laboratory, Clermont

TABLE 31
TOTAL NUMBER OF EXAMINATIONS PERFORMED BY LABORATORIES, 1948 — 1957

	YEAR									
	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
TOTAL EXAMINATIONS	1,930,248	2,063,468	2,208,502	2,368,309	2,448,916	2,316,642	2,416,546	2,602,700	2,653,191	2,629,425
TOTAL SPECIMENS	***	1,002,768	1,072,772	1,071,077	1,088,576	1,060,153	1,132,967	1,187,187	1,234,881	1,238,362
Jacksonville Central	845,957	868,359	924,276	1,034,614	1,046,571	1,003,534	940,521	1,028,251	983,244	992,741
Tampa Regional	440,172	445,022	449,490	461,872	454,122	425,492	435,850	486,438	544,368	530,510
Miami Regional	364,759	417,908	447,943	446,462	469,289	380,253	473,812	471,731	499,457	519,437
Pensacola Regional	112,486	128,655	129,266	124,995	145,688	127,639	114,192	129,245	123,023	134,268
Tallahassee Regional	76,691	93,435	112,641	104,843	114,431	123,306	125,634	123,911	112,338	136,606
Orlando Regional	19,727*	50,208	88,473	132,662	146,606	132,908	112,302	130,517	130,171	149,970
West Palm Beach Regional .....	.....	.....	.....	.....	15,578**	86,251	174,501	203,667	233,890	130,993
Melbourne Hospital	58,776	38,564	25,884	23,614	11,303*	.....	.....	.....	.....	.....
Pinellas County	11,700*	21,317	30,529	26,784	30,011	28,765	21,751	21,636	19,601	22,117
Daytona Beach .....	.....	.....	.....	12,463	15,317	8,494	7,983	7,304	7,099	12,783

* 6 Months Operation
** 3 Months Operation
*** Data Unavailable

TABLE 32
EXAMINATIONS PERFORMED BY LABORATORIES, 1957

[illegible]

TABLE 32 (continued)
EXAMINATIONS PERFORMED BY LABORATORIES, 1957

	Jacksonville	Tampa	Miami	Pensacola	Tallahassee	Orlando	Daytona Beach	Pinellas	West Palm Beach	Totals
SPECIAL RESEARCH PROJECTS										
Salmonellosis (Human)	2,472									2,472
Monkey Studies										1,487
Bacteriology	1,487									3,919
Viral Studies	3,919									26,600
Sensitivity (Antibiotic)	26,175		25						175	1,920
Rapid Sensitivity (Air Force)	1,920	225								1,454
Rapid Urea Studies (Air Force)	1,454									23,507
Streptococcus Typing	23,507									1,012
Rabies — Wild Animals (including bats)										2,988
Adenovirus Studies	1,012									5,422
Special Services	2,988									9,102
Evaluation of Media (AFEB)	5,422									7,452
Staphylococcal bacteriophage studies	9,102									

TABLE 33
SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

Examination	Number of Specimens				
	Positive		Negative	Unsat.	Total
	One or More Positive Findings	Positive for Findings Indicated			
SEROLOGY					
Syphilis	38,039		681,347	14,025	733,411
Agglutinated & Related Tests	298		4,168	183	4,649
Typhoid		72			
Typhus		3			
Brucellosis		21			
Tularemia		5			
Heterophile		180			
Other		28			13,849
Blood Typings (Rh)					
DIAGNOSTIC BACTERIOLOGY					
Diphtheria and Associated Infections	1,084		3,699	20	4,803
C. diphtheria		307			
Vincent's		54			
Streptococci		374			
Other		584			
Tuberculosis	3,026		35,779	1,844	40,649
Sputum		2,876			
Urine		4			
Gastric		113			
Spinal Fluid		1			
Other Fluids & Exudates		17			
Other		15			
Animal Inoculation		152			
Gonorrhea — Smears	25,465		34,694	343	60,502
Intracellular Gram Negative diplococci		4,811			
Extracellular Gram Negative diplococci		586			
Trichomonads		4,698			
Yeasts		2,296			
Vincent's Organisms		407			
Many Pus Cells		13,560			
Gonorrhea — Cultures	1,194		21,325	348	22,867
Enteric Infections	467		44,785	177	45,429
S. typhosa		100			
Other Salmonella		314			
Shigella (Flexner & Sonnei)		28			
Blood Cultures	29		173	1	203
Salmonella		0			
Brucella		0			
Other		30			
Miscellaneous	4,427		3,469	50	7,946
Darkfield — T. pallidum		0			
Chancroid — Ducrey's		16			
Granuloma — Donovan Bodies		10			
Gonococcus in Eye		19			
Other Eye Smears		115			
Other Eye Cultures		34			
Urine Cultures		532			
Spinal Fluid Cultures		14			
Pleural Fluid Cultures		23			
Other Fluids & Exudates		1,211			
Mycological Examinations		950			
Organisms for Identification		913			
Other Examinations		590			
SANITARY BACTERIOLOGY					
Dairy Products					28,528
Water, Drinking & Pools					63,513

TABLE 33 (continued)
SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

Examination	Number of Specimens				
	Positive		Negative	Unsat.	Total
	One or More Positive Findings	Positive for Findings Indicated			
Water, Pollution Surveys	5,108
Foods (Sanitary Quality Tests)	669
Food Poisoning	254
Utensil Swabs	2,408
DENTAL CARIES BACTERIOLOGY.	1,465
PARASITOLOGY
Intestinal Parasites	24,243	.....	108,901	1,660	134,804
Hookworm	10,344	.....	.....	.....
Ascaris	5,036	.....	.....	.....
Enterobius	3,469	.....	.....	.....
Trichuria	650	.....	.....	.....
Taeniae	0	.....	.....	.....
Other Helminths	162	.....	.....	.....
E. histolytica	216	.....	.....	.....
Nonpathogenic ameba	5,205	.....	.....	.....
Flagellates	3,526	.....	.....	.....
Others	9	.....	.....	.....
Malaria	1	.....	151	4	156
P. vivax	1	.....	.....	.....
Other	0	.....	.....	.....
CHEMISTRY	35,546
Blood	2,287
Spinal Fluid	293
Urine	875
Water	1,334
Toxicology and Narcotics	10,046
Other
VETERINARY PUBLIC HEALTH
Specimens Examined	663	.....	1,162	104	1,929
VIRAL & RICKETTSIAL
DIAGNOSTIC SERVICES	755
Serology — Neutralizations	3,760
Complement Fixation	538
Isolations (Except Rabies)	1,545
Rabies — (Total)	115*	.....	1,378	52	.....
Dogs	17	.....	.....	.....
Cats	9	.....	.....	.....
Cattle	6	.....	.....	.....
Foxes	73	.....	.....	.....
Horses	1	.....	.....	.....
Raccoons	7	.....	.....	.....
Skunks	2	.....	.....	.....
Mouse Inoculations	1,340
SPECIAL RESEARCH PROJECTS	412
Salmonellosis (Human)
Monkey Studies	466
Bacteriology	441
Viral Studies	1,064
Sensitivity (Antibiotic)	96
Rapid Sensitivity (Air Force)	430
Rapid Urea Studies (Air Force)	860
Streptococcus Typing
Rabies — Wild Animals	386	2	395
(including bats)	7*	.....	.....	.....	747
Adenovirus Studies	303
Special Services	776
Evaluation of Media (AFEB)	931
Staphylococcal bacteriophage studies.
					1,238,382

*Total Positive for Rabies 122

TABLE 34
VIRAL AND RICKETTSIAL DIAGNOSTIC FINDINGS
BY PATIENT — 1956 AND 1957

Disease	1956		1957	
	Specimens Examined	Per cent Positive	Specimens Examined	Per cent Positive
Lymphocytic choriomeningitis	89	...	151	...
Mumps	116	19.8	162	8.6
Eastern equine encephalomyelitis	83	...	153	.7
Western equine encephalomyelitis	78	...	153	...
St. Louis encephalitis	72	...	152	...
Herpes Simplex	22	36.4	1	...
Poliomyelitis Type 1	187	14.4	243	14.0
Poliomyelitis Type 2	186	10.8	247	15.8
Poliomyelitis Type 3	185	4.9	246	16.3
Murine Typhus	10	...	17	...
Rickettsial pox	10	...	17	...
Rocky Mt. Spotted Fever	3	...	41	...
Q fever	29	...	308	23.3
Influenza A	30	6.7	308	2.9
Influenza B	28	3.6	14	...
Psittacosis	218	...	38	...
LGV	32	6.3	31	19.4
Other	45	8.9		

TABLE 35
EXAMINATIONS PERFORMED IN
TUBERCULOSIS HOSPITAL* LABORATORIES, 1957

	Tampa	Lantana**	Orlando	Tallahassee**	Totals
TOTALS					
Excluding Special Studies	42,858	36,816	27,947	22,272	129,893
Tuberculosis					70,399
Diagnostic	22,794	21,333	14,188	12,084	6,741
Drug Sensitivity	2,742	2,058	1,020	921	2,013
Mycology	694	748	183	388	3,823
Miscellaneous Bacteriology	1,472	1,520	283	548	30,612
Hematology	7,862	7,916	8,625	6,209	8,255
Chemistry	3,973	1,785	1,757	740	6,152
Urine Analysis	2,285	1,393	1,515	959	1,898
Other	1,036	63	376	423	
Special Studies					
Atypical T.B.	16,641	...	...	...	...
Resected lung	730	...	...	...	...
Catalase	428	...	...	...	...
Other	605	...	...	...	...
Total Special Studies	18,404	...	...	...	...

* Operated under direction of Bureau of Laboratories; budgetarily supported by State Tuberculosis Board.

** Combined Regional Public Health and Hospital Laboratories.

BUREAU OF SPECIAL HEALTH SERVICES

L. L. PARKS, M.D., M.P.H.
Director

The Bureau of Special Health Services consists of the Division of Hospitals and Nursing Homes, which includes the Hospital Licensure Program, the Nursing Homes Licensure Program, and the Hospital Service for the Indigent Program; the Division of Chronic Diseases which includes the Cancer, Heart and Diabetes Programs; and the Division of Nutrition. Other responsibilities of this bureau include Civil Defense and the Health Departments' Accident Prevention Program.

More time was spent in the Civil Defense Program this year. Each of the county health departments has been asked to designate one member of its staff to coordinate the Civil Defense activities in the county health department with the Civil Defense organization. The state health officer was designated by the governor as the Medical Director of Civil Defense. A director for casualty services was appointed, as well as a director for public health services. The state has been divided into six Metropolitan Target Areas, and in each of these areas a health officer has been appointed who is responsible for public health services. An assistant health officer has been appointed in each of these areas. The medical society in each of these areas has appointed a physician who is to be responsible for casualty services. Efforts have been made to coordinate the veterinarian, dental, nursing, and hospital associations programs along with that of the health department and medical societies. It is planned that in each of the Metropolitan Target Areas all of the medical and allied personnel will be organized similar to the state plan. It is hoped that some time can be devoted to a Civil Defense Training Program throughout the state, and particular attention needs to be given to training in radiology. A 200 bed emergency hospital was set up during the meeting of the Florida Medical Association in Hollywood Beach, with the assistance of one of the Florida National Guard Medical Companies. Efforts are being made to have a number of these emergency hospitals stored in suitable locations throughout the state. A meeting was called by the governor in December for the purpose of orienting each of the state agencies to their responsibilities in the Civil Defense Program and asking the cooperation of all concerned in organizing a survival plan for the state.

In the health departments' accident prevention program, a special report is being made on each accident in which an employee of the county health departments is injured. These reports are evaluated and attention is given as to how the accident might have been prevented. A memorandum is sent to all health department employees monthly for the purpose of accident prevention. There were 26 accidents reported among health employees during the last seven months of the year.

DIVISION OF HOSPITALS AND NURSING HOMES

L. L. PARKS, M.D., M.P.H.
Director

HOSPITAL LICENSING PROGRAM:

The 1947 Legislature passed a Hospital Licensure Law and regulations were adopted by the State Board of Health based upon this law. The purpose of this law was primarily to make it possible to participate in the Hill-Burton Construction Program. The law was applicable only to those hospitals receiving Federal aid. In 1956, 102 hospitals were licensed in order to participate in the State Welfare Department's public assistance program. The hospitals were licensed on a voluntary basis, if the hospital wished to participate in the State Welfare Department's program for public assistance recipients. No formal inspection was made of hospitals at that time, because it was necessary to get the hospitals licensed within a 30-day period. The 1957 Legislature amended the hospital law, which now requires that all hospitals with ten or more beds be licensed annually. The law also provided that an Advisory Council would be appointed to advise the State Board of Health on policies for carrying out this law. This council was appointed the latter part of the year and plans to have its first meeting in January 1958.

Members of the Hospital Licensure Advisory Council are: James H. Sweeney, DeLand, Vice-Chairman; William W. Richardson, M.D., Graceville; Autha W. Forehand, Tallahassee; John F. Wymer, West Palm Beach; Robert B. Eleazor, Secretary and Raymond H. King, M.D., both of Jacksonville.

Beginning July 1, 1957, when the amended law went into effect, a program of evaluating the hospitals was started throughout the state. A hospital administrator consultant was added to the staff. During the last half of the year 117 hospitals were evaluated, of which 40 were licensed and 77 were not, following the first visit. A second evaluation is to be made on the hospitals not yet licensed. The policy has been to have a local nurse and sanitarian work with the hospital consultant as a team in making the visits to the hospitals. Efforts have been made to impress upon the hospitals the importance of fire safety, sanitation, nursing care, building requirements and records. Considerable time and effort have been given to preparing suitable rules and regulations for the operation of this program, in cooperation with the Florida Hospital Association and the Florida Medical Association. There has been a problem of deciding what should be included in the basic regulations, but at present licensure has been based upon the 1947 regulations.

NURSING HOMES LICENSING PROGRAM:

During the year 315 homes were licensed with a bed capacity of 7366. The average bed capacity was 23 beds. The county health departments have continued to make inspections of these homes and

to make recommendations as to whether the home should or should not be licensed. Attention was given to fire safety, building construction, sanitation, and nursing care. Efforts have been made to see that these homes meet the local regulations, as well as state requirements. It has been necessary to send out the 10-day notice letter in 12 instances. In nine instances, the 10-day notice letter caused the operator to correct the major deficiencies and it was not necessary to go on and have a hearing. Only one hearing was held during the year, and this case is still in the hands of the courts. In one county a warrant was issued for the operation of a nursing home without a license and the local courts upheld the case. The operators were fined and discontinued the operation of the home. Another case is still pending because of the operator's illness. The monthly publication "Living in Later Years" has continued to be issued to the nursing home operators, and meetings have been held by some of the county health departments for the purpose of assisting them. Cooperation has been given the Florida Nursing Home Association, as well as the district associations. It is believed that the standards of the nursing homes have been improved. However, because of the small allowances that are available for welfare recipients, in most of the counties it is difficult for some of the homes to meet the requirements. A few of the larger counties supplement the allowances for welfare recipients and this has made it possible to raise the standards there.

HOSPITAL SERVICE FOR THE INDIGENT PROGRAM:

The 1955 Legislature passed the act establishing the Hospital Service for the Indigent funds. The program went into effect January 1, 1956.

Members of the Advisory Committee for Hospital Service for the Indigent during 1957 were: H. Phillip Hampton, M.D., Tampa, Chairman; Edward Jelks, M.D., Jacksonville; Frank J. Kelly, Miami; Richard H. Simpson, Monticello; J. A. Long, Jr., M.D., Palatka; Pat Groner, Pensacola.

The law required that the counties appropriate 50 cents per capita to participate. However, the state, for the first 18 months of operation, provided only eight cents and if all the counties had participated they would have been required to appropriate 50 cents per capita per year. The result was that only 24 counties participated during the first half of 1957. The 1957 Legislature provided \$4,000,000 for the two-year period beginning July 1, 1957. This made it possible for the state to provide its 50 cents per capita per year to the counties wishing to participate in the program. Because of the increase of state funds, by the end of the year all of the counties were in the program except eight. In October 1956, funds were made available by the State Welfare Department and Federal Government providing hospital care for persons on the State Welfare rolls. However, this program was discontinued as of June 30, 1957. During the nine months of its operation, it was a state-wide service administered jointly by the county health departments and welfare departments. Considerable time has been spent during the year meeting with County Com-

missioners, Hospital Boards, and other groups working out the details in each county. A tabulation has been prepared showing some data that has been accumulated from the operation of the program and it is hoped that as time goes on more interesting data can be obtained from services rendered by this program. It is interesting to note that the average hospital stay under this program has been 10 days, and that the average per diem cost was \$17.91 per day. However, this is not the true per diem inasmuch as some of the hospitals have not submitted a per diem cost statement and are being paid only \$15.00 per day until a cost statement is submitted. The average cost per patient was \$179.16.

In summarizing the development for this program, records indicate that for the quarter July 1, 1957 through September 30, 1957 total expenditures of \$716,121.75 approximate total expenditures for the entire preceeding fiscal year. For the quarter ending December 31, 1957, it is estimated that expenditures will exceed \$1,000,000. For the quarter ending September 30, 1957 there were 3975 patients admitted, representing 35,650 patient days of service. For this period there was a slight increase in both the average cost per patient stay and the average per diem cost per patient. Although the average per diem cost increased from \$17.91 to \$20.09, the average stay per patient decreased from 10.0 days to 9.0 days, thereby presenting an average cost per patient hospital stay to be \$180.06.

TABLE 36
HOSPITAL SERVICE FOR THE INDIGENT
SUMMARY OF EXPENDITURES AND HOSPITALIZATION
PROVIDED, JULY 1, 1956 — JUNE 30, 1957

Expenditures for Hospital Care.....	\$ 914,978.00*
State funds	\$ 334,317.48
County funds	\$ 580,660.52
Average Cost per Admission	\$ 179.16
Average Cost per Patient Day	\$ 17.91
Admissions	Total..... 5,107
Number of Patient Days Rendered	51,095
Average Length of Stay in Hospital	10
Admissions:	
By Race.....	White 2,680
Colored	2,427
By Sex.....	Male 2,343
Female	2,764
By Age (in years).....	0-20 1,443
21-64	2,826
65 & Over	838

* Does not include direct payments to participating hospitals for:
59 Non-resident indigent patients \$ 5,694.43
44 Indigent Indian patients \$ 4,535.68

TABLE 37
CANCER PROGRAM EXPENDITURES, 1957

County	Expenditures	County	Expenditures
State Total	\$162,808.25	Jefferson	262.90
Hospitalization	149,298.52	Lafayette	992.25
Radium	3,513.28	Lake	399.81
Out-patient Diagnostic	9,996.45	Lee	2,307.25
Alachua	1,085.00	Leon	2,019.60
Baker	1,410.00	Levy	16.25
Bay	4,301.85	Liberty	144.00
Bradford	816.75	Madison	701.03
Brevard	1,039.55	Manatee	1,606.90
Broward	3,977.19	Marion	1,179.27
Calhoun	335.50	Martin	63.25
Charlotte	403.00	Monroe	4,844.90
Citrus	641.00	Nassau	1,833.50
Clay	556.00	Okaloosa	1,569.50
Collier	897.43	Okeechobee	170.00
Columbia	1,033.84	Orange	3,399.86
Dade	34,728.00	Osceola	1,822.27
DeSoto	292.50	Palm Beach	4,899.68
Dixie	11.25	Pasco	3,449.25
Duval	12,924.38	Pinellas	4,500.30
Escambia	5,613.55	Polk	8,203.46
Flagler	17.00	Putnam	2,497.54
Franklin	825.75	St. Johns	1,139.75
Gadsden	1,208.49	St. Lucie	993.50
Gilchrist	279.50	Santa Rosa	351.00
Glades	6.25	Sarasota	2,832.57
Gulf	913.25	Seminole	1,903.52
Hamilton	1,669.25	Sumter	1,436.75
Hardee	204.00	Suwannee	1,771.49
Hendry	16.25	Taylor	1,094.37
Hernando	188.75	Union	102.25
Highlands	1,237.25	Volusia	3,968.25
Hillsborough	16,718.41	Wakulla	804.39
Holmes	1,428.25	Walton	1,212.25
Indian River	215.25	Washington	1,151.75
Jackson	2,169.20		

DIVISION OF CHRONIC DISEASES

L. L. PARKS, M.D., M.P.H.
Director

DIABETES:

Insulin Distribution: Insulin was distributed to 2768 individual diabetics through the county health departments or their approved clinics during the year. The number of diabetics receiving insulin in 1956 was 2566. The determination of indigency is made by each of the health departments or welfare department. Distribution of insulin was made on a quarterly basis and the demands for insulin exceeded the

supply. A total of 34,577 vials of insulin were distributed to the counties during the fiscal year 1956-57. This represented 21,222,800 units, at a cost of \$39,588.10.

Educational Activities: The monthly bulletin "Timely Topics" was issued regularly during the year to 2500 persons. This bulletin is intended to assist the diabetic in helping to better handle his own condition. In cooperation with the Florida Medical Association and the Department of Medicine of the University of Florida, the division assisted in bringing two outstanding speakers to the fifth annual meeting of the Florida Clinical Diabetes Association. In January, a regional diabetes meeting was held in Tampa in order to stimulate more interest in diabetes control not only in Florida but in the surrounding states. Each of the surrounding states had representatives present for this meeting.

Diabetes Detection: The Division of Venereal Disease Control continued to assist in a screening program in connection with its serology surveys. However, the venereal disease survey program was discontinued the latter part of the year. Additional funds were made available by the U.S. Public Health Service during the last part of the year and a selective screening program was started. Efforts are being made to offer a blood sugar determination to relatives of known diabetics. One person was added to the division to strengthen the selective blood sugar screening program. It is believed that this study which has just been started will be interesting and useful in detecting early diabetes. An additional person is expected to be added to this program at the beginning of the next year. A new Lay Diabetes Association has been organized in Manatee County and Lay Associations in the four other areas of the state continue to be active. Cooperation has been given each of these associations insofar as possible.

CANCER:

This program has continued with these purposes in mind: Early diagnosis of cancer, hospital care and an educational program. In the first half of the year, state funds were available to the cancer patients who needed hospitalization if recommended by a tumor clinic director. The 19 tumor clinics continued operation during the year. These tumor clinics, operated for the purpose of encouraging early detection and treatment, include hospitalization of the individual cancer patients, and are financed jointly by the American Cancer Society, (Florida Division), State Board of Health and local hospitals. There are no fees for the physicians who examine and treat the patients attending the clinics. The cancer law which was passed in 1947 remained on the books. However, funds for the hospitalization of cancer patients were merged with the Hospital Service for the Indigent Program as of July 1, 1957. This Program is to cover acutely ill or injured patients who are indigent. Cancer was considered as falling into this category, if it was an early case. Special funds for the operation of the Cancer Program were not asked of the Legislature, inasmuch as it was believed that the Cancer

Program would be merged with the Hospital Service for the Indigent Program as the counties began to participate. This plan of operation has been reasonably satisfactory and the same policy has been followed in cancer cases as it has been in the past years. That is, cancer cases could not be accepted under the present program until the patient had been processed through one of the 19 tumor clinics in the state. Table 37 shows the amount of cancer funds spent during the year by counties. It is interesting to note that the number of cancer cases reported during the year dropped from 6591 cases in 1956 to 4599 cases reported this year. It is quite obvious that this drop is due to the fact that the reporting of cancer cases in the past has been done by the central office from the cancer applications that have come into that office, and that the 19 tumor clinics in the state have not reported the cases that have been seen. Therefore, this drop in the number of cases reported is not accurate. Some cancer patients are being admitted under the present hospital care program without being processed through the tumor clinics. In cooperation with the American Cancer Society, Florida Division, and local medical societies, the Cross Roads Cancer Seminar for physicians was held in Gainesville, Madison, Apalachicola, DeFuniak Springs, Ft. Pierce, Ft. Myers, Winter Haven and Rockledge. The total attendance was 177. The attendance in South Florida was much better than in West Florida, which was due to the fact that the meetings were held at the time of the regular medical society meeting. The close working relationship between the American Cancer Society and the State Board of Health has continued. The Florida Cancer Council had two meetings during the year. This council serves primarily as an advisory coordinating group for all cancer programs in the state. How to handle the terminal cancer case has continued to be a problem. The hospitals do not have sufficient beds for these cases, nor funds, and hospitalization is often not necessary.

HEART DISEASE

S. D. Doff, M.D., M.P.H.
Director

As a specific program in the bureau, the Heart Disease Control Program is concerned particularly with the development of useful information and activities which will result in both primary and secondary prevention of heart disease through education, community service, and research to help avert unnecessary disability and premature death due to heart disease.

In-service and post-graduate training opportunities have been created to acquaint hospital and public health nurses with current concepts in the prevention, diagnosis, treatment, and rehabilitation of cardiovascular disease.

Nurses from three county health departments attended a special field course in cardiovascular disease held at the University of North Carolina. Two other nurses were sent to the Institute of Physical Medi-

cine and Rehabilitation at New York University for an indoctrination course in rehabilitative nursing, thus adding to the existing corps of public health nurses with special training in this field. The skills acquired by them are in great demand by physicians treating victims of heart disease and stroke.

The third biennial cardiovascular seminar for nurses was held in six major Florida cities. The topic for discussion this year was coronary heart disease, and a coordinated program was presented demonstrating the role of the patient, hospital nurse, physician, nutritionist, medical social worker, public health nurse, and vocational rehabilitation counselor in managing a patient with coronary heart disease. Five hundred nurses attended the seminars. Several hundred requests for educational material were filled and additional material was distributed to the directors of nursing schools and nursing supervisors in county health departments.

Annual seminars for physicians are held in Jacksonville, Tampa, and St. Petersburg under the auspices of the respective heart association. The Jacksonville seminar was presented as a joint activity of the post-graduate division of the University of Florida Medical School, the Northeast Florida Heart Association, and the State Board of Health. The large attendance justifies continued support of such seminars.

A mobile heart library is loaned to small hospitals without medical libraries. Current publications are added to this bookshelf as they appear. It is hoped that this will encourage small hospitals to organize and maintain medical libraries. During the year this library was loaned to four hospitals located in predominantly rural areas of the state.

For the education of the public and persons in the medical professions, the State Board of Health's audio-visual library has been expanded to include nearly all desirable motion pictures, recordings, tapes, and lantern slides on cardiovascular disease. These materials continue to be popular with physicians, both as a learning experience for themselves and for teaching others about heart and blood vessel diseases. Publications have been distributed to health departments, nursing homes, and hospitals which pertain principally to the management of patients with strokes, and to the prevention of rheumatic heart disease and recurrent rheumatic fever by the prompt treatment and prophylaxis of streptococcal infection.

This program was privileged during the three summer months to supervise the activities of a sophomore medical student from the University of Florida who was assigned to the State Board of Health on a grant from the Palm Beach County Heart Association. Effective instruction in the principles of public health practice and the functions of the State Board of Health with particular reference to epidemiology and biostatistics was afforded. It is expected that the University of Florida will continue to cooperate with the State Board of Health in this type of training.

Small grants-in-aids were made to county health departments. These funds have been utilized in the counties for the employment of additional public health nurses who assist in the follow-up home care of patients, institute case finding procedures, and develop referral systems for the adequate management of children and adults with heart disease. As a result of these efforts, county health department activities in heart disease control have increased fifteen-fold with a total of 14,632 visits in 1957.

Organizational meetings were carried out in six communities interested in establishing cardiac clinics during the past year. Final arrangements await completion of plans in five of the areas and one clinic is now operating successfully. A joint meeting was held under the sponsorship of the State Board of Health for those physicians and clinic directors who are actively engaged in maintaining services to indigent cardiacs. This meeting was attended by representatives from eleven communities that either have cardiac clinics or are in the process of organizing one.

Another specific community service which was begun as a demonstration project in January 1957 is the operation of a Work Classification Unit for the rehabilitation of patients with cardio-pulmonary disease. This unit serves Northeast Florida from its main location in the Duval Medical Center under the sponsorship and with the cooperation of representatives from the Vocational Rehabilitation Service of the State Department of Education, and the Northeast Florida Heart Association. Of thirty patients examined by the team, seven have been successfully encouraged to return to work and four await action by the Vocational Rehabilitation Service.

Several projects have been organized within the past few years as a means of investigating the causes and measures for control of certain types of heart disease in Florida. The Rheumatic Fever Case Register continues the collection of current data concerning proven cases of rheumatic fever and/or rheumatic heart disease of recent onset. This register has been established to run for several years with the hope that more specific information may be gathered about the natural history and pathogenesis of this disease in temperate and semi-tropical areas of the state. A preliminary report utilizing death certificate data from the register has been submitted to the "Southern Medical Journal" for publication, and additional reports of the first two and one-half years experience are in preparation.

A study of the influence of ancillary medical services on cardiovascular disease was begun in conjunction with the newly organized Jackson County Cardiac Clinic. This project has been designed to evaluate the overall effort of a multiphasic clinic upon the cardiac patient, the family, and the community. The medical and public health aspects of the clinic are being continued satisfactorily.

Clinical investigation among the children at the Florida State School for the Deaf and Blind is being continued with the cooperation of the U. S. Naval School of Aviation Medicine in Pensacola. An earlier study

has indicated that a high prevalence of congenital heart disease exists in this group of children and abnormal EKG patterns are expected to show a similar high prevalence.

A pilot study for the utilization of hospital discharge diagnoses in the study of general community morbidity is now under way and data from two Jacksonville hospitals have been processed for tabulation by mechanical equipment. A system for more elaborate gathering of data, processing, and tabulation is being developed with the Bureau of Vital Statistics and with the Statistical Laboratory of the University of Florida. If this pilot plan proves feasible and is accepted by the Hospital Council of Jacksonville and the Florida Hospital Association, a more extensive operation will be designed to include the rest of the hospitals in the Jacksonville area, and possibly the larger hospitals in Florida eventually.

A special research project has been designed with the Duval Medical Center Hypertensive Clinic. Patients followed in this clinic are to be studied from the medical and the medical-social aspects, and a complete evaluation of both phases will be made in order to document the long-term effectiveness of drugs with and without the extra morale service. The project utilizes the experience of cardiologists, medical social workers, visiting nurses, and other ancillary medical personnel in the provision of services that are designed to give rehabilitative as well as curative and palliative results. Evaluation of a new anti-hypertensive drug is being carried on concomitantly through the cooperation of Wyeth laboratories.

A grant was given to Dade County for use by Dr. M. J. Takos in developing a research project in coronary heart disease.

Dr. John S. Turner, Jr., S.A. Surgeon (R), U. S. Public Health Service, who has been on loan to the Heart Disease Control Program has assisted greatly in carrying out the objectives which have been outlined in the foregoing remarks.

Activities in heart disease control owe their success to an increasing awareness of the importance of cardiovascular disease as a community health problem among health officers and community health agencies. In addition, Florida seems to have been blessed with the influx of a large number of highly competent physicians with a particular interest in diseases of the cardiovascular system as a community problem as well as an individual problem calling for measures of prevention, diagnosis and treatment.

Congenital malformations of the heart are being diagnosed with increasing frequency. Physician teams in various parts of the state are preparing themselves for the treatment of those cases requiring open heart surgery. Coronary heart disease and heart disease due to high blood pressure, the chief cause of death, is now being studied extensively and will be attacked with even greater vigor in the laboratories of our two new medical schools.

DIVISION OF NUTRITION

MARJORIE M. MORRISON, M.S.
Chief Nutrition Consultant

This division enjoyed a year without staff turnover. At the beginning of the year, two of our four regional positions were vacant. One of these was filled late in January; the other was filled in May. In December, a fifth regional position was created and a nutritionist was employed for it. In addition to this, a nutritionist was secured for the migrant project. (For further details of this project, please refer to the report of the Bureau of Maternal & Child Health elsewhere in this volume.)

With continuity of service on the part of the nutritionists, there was a decided increase in the number of requests received. The division continued working on a request basis although some counties did not call on it to any extent. The establishment of the fifth position mentioned in the paragraph above was done so that the nutritionists' areas will be smaller. It is hoped that in 1958, staff members can assist those counties not currently using the service in understanding the role of the nutritionist in a public health program.

There was a decided trend upward in the number of consultations to institutions. Whereas 1956 found visits paid to 35 different institutions, this year one or more visits were made to 88 — an increase of approximately 150 per cent. Institutions, for our tabulation purposes, include small hospitals, nursing homes, nurseries, or children's homes where group feeding is practiced.

The Diet Manual for Nursing Homes was revised and will be available early in 1958. A check sheet was prepared for evaluating the different phases of food service in nursing homes. This was done to enable us to obtain uniform data for further study throughout the state.

Another trend noted this year was one toward more group work with health department staffs. The number of group conferences jumped from sixty-one in 1956, to one-hundred fifty-two in 1957. While the number of individual conferences with members of health department staffs was approximately twice that of the group conferences, on a percentage basis the increase was not so large.

The nutrition aids for nurses distributed early in 1957 by the nutritionists stimulated a great deal of interest. There were fewer requests for assistance with budgeting problems and more requests for assistance with special diets for prenatal, diabetic and cardiac patients. More interest was shown in developing materials for use in group instruction of clinic patients in nutrition. Assistance was given in planning demonstrations and exhibits for clinic use.

Realizing that heart disease is a significant public health problem, more effort was concentrated on work in this area. A nutritionist participated in each of the cardiac institutes for nurses held throughout the state. (For further details of this program, please refer to the report of the Division of Chronic Diseases — Heart Control Program in this same section.) In addition to this, the staff cooperated with local heart associations in five counties in conducting classes for persons on low sodium diets. A series of television programs on diet in relation to heart disease were planned in cooperation with one heart association.

Mass feeding and Civil Defense entered into the activities of the division for the first time. Assistance was given with a training course in mass feeding in Marion County, and complete responsibility was assumed for teaching one in Taylor County. Three staff members attended Civil Defense seminars; a fourth participated in Operations Alert at the Regional Civil Defense Headquarters in Thomasville, Georgia.

Cooperation with different state agencies continued on much the same basis as previous years. The school lunch program of the State Department of Education again claimed more time than programs of any other state agency. Requests for training school lunch personnel in the area of nutrition were so numerous that they could not be handled. New policies regarding our participation in training programs were established with the state school lunch staff.

Within the schools themselves, there was a trend toward working with faculties rather than with individual teachers. This was gratifying from the standpoint of conservation of time. Also, it was felt that a school-wide attack on nutrition problems was more effective than an effort on the part of one or two classes.

Numerous programs were given for parent-teacher groups; several workshops were conducted in the area of child nutrition. Assistance was also given at the state-wide workshop of the Florida Congress of Parents and Teachers.

Several schools of practical nursing were furnished with materials and were assisted in developing outlines for teaching nutrition. Lectures were given to numerous schools of nursing on the role of nutrition in public health. Public health interns from the collegiate schools of nursing were given individual assistance with families having nutrition problems.

The field of geriatrics was not overlooked. One staff member continued to serve on the gerontology committee of Pinellas County; another was asked to serve as consultant in nutrition to the case conferences of the geriatrics clinic at the University of Miami. A fairly detailed study of the eating habits of older people was made by one nutritionist.

The 40th annual meeting of the American Dietetic Association was held in Florida this year. This was the first time the Association has met in the South. All members of the staff participated in some way.

One member of the staff was president of the Florida Dietetics Association; another was a national officer. Because of this, more time and effort was given to this activity than is customarily given to professional meetings of this type.

It was gratifying to note that staff members actively participated in over seventy per cent of all professional meetings, workshops, and institutes attended; in 1956, they participated in approximately fifty per cent of those attended.

One member of the staff again edited Timely Topics for Diabetics. The division continued publishing "Nutrition in a Nutshell" on a bi-monthly basis. Activity in radio and television programs increased.

BUREAU OF SANITARY ENGINEERING

DAVID B. LEE, M.S., Eng.
Director

FOREWORD

The citizens of Florida, as well as many beyond its borders including thousands of annual visitors, have confidence that there is a regulatory agency conscientiously involved in protecting and safeguarding the environmental factors affecting their well-being. The responsible regulatory agency upon which this confidence and dependence rests is the State Board of Health through the basic activities comprising the operational programs of this bureau.

During 1957, Florida was reported as the fastest growing large state within the union. This growth in population has been paralleled by a rapidly increasing activity in industrial, commercial and public utility enterprises. Health problems in the field of sanitary engineering control have, as a consequence, been greatly increased in number and in magnitude. The growth of personnel within this bureau has not kept pace with the problems or the programs' needs. High quality technical personnel are becoming increasingly more difficult to obtain at present salary standards. Although the new merit system was established during the year with increased salary levels, the demand for engineers, especially within the state, continues to exceed the supply. Several highly regarded employees, in two instances in key positions, resigned during the year to accept more compensating employment within the state.

With a total population of 7.5 million predicted by 1967, the bureau is cognizant of the increased responsibilities and is planning future programs and present controls on these realistic estimates. It is imperative that proper planning in budgetary allocations and means of attracting adequate personnel receive due consideration.

This report reflects the emphasis and activity devoted to public water supply during the year. Water supply systems or extensions for over 300 subdivisions were approved, representing 67 per cent of the total installations approved. The ultimate additional quantity in water supplies provided for through facilities constructed or proposed for construction during the year was slightly over 88 million gallons per day. A gratifying improvement in quality continued through the addition of treatment processes of softening and filtration facilities to many existing and new water plants.

The increase in the number of water plants in operation to a total of over 600 has added a greatly increased responsibility on the bureau. It is literally impossible, with limited number of personnel to adequately supervise operation.

In the supervision of swimming pool construction, the work load on engineering personnel was greatly accelerated. Statistical representations

on swimming pool activities are given in this report. The control of supervision of natural bathing places, bottled drinking water plants, common carrier water sanitation and the cooperative training programs conducted are other aspects of the bureau's responsibility.

Activities and progress in the fields of sewerage, waste disposal and in the control and abatement of stream pollution showed marked increase and advancement during the year. Although these three programs are more or less separate in application of methods, the combined activities are directed toward an ultimate control and abatement program. Pollution is the addition of any substance to water that interferes with any of the legitimate uses of water or is detrimental or potentially detrimental to animal, plant or aquatic life. There are many kinds of waste materials originating from habitations and industrial sources. Adequate treatment of these wastes correlated with the degree of pollution permissible results in fair use of the streams without damage to the resource. The program therefore involves the review toward approval of plans for all sewage treatment and disposal projects, for all plans pertaining to treatment and disposal of industrial wastes, and surveys of chemical and biological conditions of streams and lakes used or proposed for use as receiving waters by these utilities and other enterprises. The population and industrial growth of the state has also in this instance increased the number and complexity of these problems.

The advancement in sewerage construction is given in tables and figures in this report, together with estimated costs of these projects. The ultimate goal is the elimination of all raw or untreated wastes now reaching water courses or drainage wells, and the installation of adequate sewerage service for 90 per cent or more of the population living in municipalities, cities, and urban subdivisions in densely developed areas.

The advancements and increased production in industrial output by the pulp and paper mills, citrus processing plants, phosphate industry and the addition of plating mills and chemical processing plants to the many other waste producing industries has greatly increased the importance and supervision of stream pollution. Unquestionably this industrial growth will continue in relationship to population growth. The construction of a required laboratory, with space and equipment allotted to sanitary engineering analyses is now underway. Funds for construction and equipping of a stream sanitation laboratory in Winter Haven, the center of the citrus industry and adjacent to the phosphate industry, is a proud achievement.

The continuance through a second year of the Federal Water Pollution Control Act, (Public Law 660), with grants to some cities having critical sewage pollution problems for the construction of treatment works, heads the bureau's control activities in this area. The act, with available appropriations, has focused the attention of city officials on pollution problems and stimulated their efforts for correction.

The State Board of Health's interest in radiological health was pursued through the year. A study of the extent of radioactive material in the waters of Florida is well underway. The accumulation of background data on all waters is part of a forward program in expectation of future nuclear energy developments.

The supervision and control of environmental sanitation in most all of its phases is vested in the county health departments, with certain responsibilities placed on this bureau. Activities consisted in cooperative control measures by the bureau with other bureaus and divisions of the central office, and with personnel of the county health departments. In general, increased attention was directed to tourist and trailer camps, food processing, shellfish and crustacea processing and to school sanitation programs. Particular emphasis was directed toward adequate sewerage and water supply facilities in the expanding school construction program.

Progress has resulted in the strict application of the policy of the State Board of Health in regard to sewerage recommendations for subdivisions in the fringe areas of cities. The use of household septic tanks on an unrestricted basis in mass housing developments and in areas having such potentials remains a major problem. The large reduction in cases (reviewed for approval) of individual sewage disposal to serve individual houses and for subdivisions as a whole, is due to the strict adherence to the policy to avoid wholesale use of septic tanks. This does not necessarily indicate that adequate sewerage in lieu of septic tanks was obtained in a majority of cases. At an increasing rate the responsibility for these inherent defects in the future environmental conditions of Florida is becoming the burden of the county health departments.

PUBLIC WATER SUPPLY AND TREATMENT

JOHN B. MILLER, B.S., M.P.H.

GENERAL

Work of the water supply and treatment section during 1957 continued in relation to the water contact of the environment, in the direction of statutory requirements for sanitary control of public water works and of recreation facilities for bathing and swimming which serve the public, with relatively minor fraction of effort devoted to such as bottled drinking water and the placing of potable and culinary water aboard common carriers. A two-phase approach was followed in the principal work, i.e., the review and appropriate recommendations as to approval of engineering plans and specifications for proposed facilities and the sanitary supervision of the newly completed or other existing facilities — involving both public water systems and public swimming pools.

The volume of engineering plans reviewed during the year was quite large, continuing the trend of increasing each year. So far as mere

figures can show, this volume is reflected in tabulated statistics herein. There were a combined total of 797 projects for which plans were reviewed and recommended for approval for water supplies and swimming pools, having a combined dollar volume or estimated construction cost of \$40,053,800. (This includes 149 plans for pools, with estimated cost total of \$2,601,440, approved in five of the county health departments, 20 per cent of which were checked in central office.)

For comparison, the combined total number of projects for which engineering plans and specifications were handled by the water section during the year represent a 25.5 per cent increase over the number handled in the previous year; and the combined total estimated cost was a 28.3 per cent increase. (Significance of this trend involves the too few in number of professional personnel who have been made available to the water section to handle this volume).

Sanitary supervision of operation or the second phase of control of the water contact in the environment, assumed larger proportions during the year. With the placing in service of newly completed water supply facilities there are over 600 systems serving the public, not including many smaller systems serving less than 100 persons each, and to say nothing of the pool operation problem. Related to this is the in-service training of operation personnel which continued to receive the attention of the water section during the year, but which was not sufficient due to lack of personnel.

NEW AND PROPOSED CONSTRUCTION

There are listed in Table 38, the projects for proposed new water works and systems and proposed expansion of such existing facilities, in the 41 counties involved, for which engineering plans and specifications were approved by the department during 1957. Continual rapid growth of the state is seen reflected in the total of 468 such projects. This is an increase exceeding 34 per cent over the number (349) of such projects approved in 1956. A look at the tabulated estimated costs of these projects also shows an increase, as the total of some \$34,414,900 is 26 per cent more than the estimated cost (\$27,325,000 in 1956) of the facilities for which plans were approved in the previous year.

An analysis of the tabulations shows that a great many of the proposed water projects continue to be designed for realty subdivisions, many of which are outside municipal corporate limits. Plans and specifications were approved for 308 subdivision systems or extensions, as compared with a total of 202 in 1956, or a 52.5 per cent increase. The remainder (160, or 34 per cent of the total) were for municipal projects except 11 for larger trailer park water systems and six for the sanitary or "domestic" water facilities to serve industrial plants.

Plans were approved for a total of 57 new systems. Some of the projects (71) included both "supply" and distribution work; there were 338 projects for new or existing distribution extensions; and included

in all the plans approved, are proposed facilities for 95.270 million gallons per day capacity.

The estimated dollar volume of the approved projects is divided about one-third (\$11,839,330) for "supply" facilities and the remaining two-thirds (\$22,575,627) for distribution systems and extensions.

Construction was completed during the year on many new plants or additions. Included were the softening and filtration plants serving water to travellers on the Sunshine Parkway at service centers in Broward, Palm Beach, and Saint Lucie Counties; also plants at City of Dania, State Hospital (Chattahoochee), Cocoa, Miramar (Broward County), Boulevard Heights (Broward County), Playland Isles (Broward County), South Coral Homes (Dade County), Adamo Acres (Hillsborough County), Del Rio Estates (Hillsborough County), Duda Labor Camp (Palm Beach County) and Kenneth City (Pinellas County).

FLUORIDATION OF WATER

Together with the three cities (Belle Glade, Orlando and Ocala) commencing fluoridation of their public water supplies in 1956, these cities also continued this practice designed to reduce incidence of dental caries among children: Clewiston, Gainesville, Naples, and Miami (also serving Coral Gables, Hialeah, Miami Beach, Bal Harbour, Surfside, etc.). The City of Saint Petersburg suspended fluoridation of its water supply on July 2nd.

OPERATION OF WATER WORKS

The data revealed through the 1956 inventory of public water supplies (serving more than 100 persons), together with the number of new facilities for which plans were subsequently approved, indicate a total of over 600 public supplies in the state for which the department has responsibility in sanitary supervision of operation. The limited number of personnel made available for this work results in efforts spread too thinly for fulfillment of the department's responsibility. The part time of one man from the central office plus limited activity of the six county sanitary engineers and of the five regional sanitary engineers, was practically the entire effort of the health departments in this work down through the year. In one special area (Orange County) a survey was started in the latter part of the year to catalog the smaller "community" water supplies (serving fewer than 100 persons), to supplement the 1956 inventory, and effect closer supervision of operation in this area of questionable ground water resources. The county health department is giving considerable assistance with this project.

In the previous year, engineers of the section visited a few (59) of the water plants which had not been submitting operation reports, but this could not be resumed in 1957, as the personnel could not get to it because of other details. Hence, the status of operation of such public water systems is not known to the department.

The improvement of water plant operation through in-service training of water works personnel continued during the year as an important activity of the section. (This is covered more in detail elsewhere in this report).

PUBLIC SWIMMING POOLS

Reference to the data in Table 39 will show the inclusion of a total of 329 public swimming pool projects for which engineering plans and specifications were approved in 1957. The arrangement was continued whereby county sanitary engineers of local departments in Broward, Dade, Hillsborough, Palm Beach and Polk Counties approved the plans and specifications in those counties. (Palm Beach County Health Department was without an engineer during half the year, therefore, about one-half the number of pools listed there were actually approved in the central office.) About 43 per cent of the total number were approved by these five local department engineers.

The geographical distribution of pool projects tabulated shows a large number of the total to be in Dade, Broward and Palm Beach. There were fewer (146 in 1957 and 159 in 1956) in these three counties than during the previous year. The 146 projects in the three counties represent 44.3 per cent of the statewide total approved; and comparative figures were 55.7 per cent in 1956 and about 66 per cent in 1955. The data indicates spread of public swimming pool construction and operation into other parts of the state.

Total number of pool plans approved in 1957 represents a 15 per cent increase over the number of such projects for which plans were approved in the previous year. The estimated cost, \$5,638,904, of these projects also is an increase, 43 per cent over the dollar volume of the pool projects approved in 1956. This represents an average estimated cost of \$19,400 per pool project, a figure somewhat higher than that for the previous year when such average was \$13,790. The relatively low average cost estimate for pools in 1957, however, clearly indicates the continued trend of construction of many smaller pools at motels, apartment houses, motor courts, et cetera. With very few exceptions, the designs for these pools all include chemical treatment, filtration and recirculation systems. Operation aspects are apparent when it is kept in mind that hiring qualified pool operators, per se, for the smaller pools often results in a financially top-heavy feature of the overall enterprise where a pool is put in as added attraction.

Permits covering operation of public pools after they are completed, the equipment adjusted and water treatment facilities properly placed in service, totaled 231 during the year. This represents an increase of 16 per cent over the number of public pool permits issued by the department in the previous year. Added to those pool permits previously issued and remaining valid, results in a total of 1159 permits for public pools in force at the year's end. Table 39 shows distribution of pools under permit by counties.

NATURAL BATHING PLACES

Four permits were issued pertaining to the sanitary control of natural bathing places during the year. Three of these were in Hillsborough County, and one was for a bathing place in Marion County. These together with permits previously issued and remaining valid represent a total of 51 natural bathing places under permit; the geographical distribution of such places is seen in Table 39.

The procedure for sanitary control of natural bathing places continued as follows: When application for permit is received, the area under consideration is surveyed to determine whether sanitary hazards are evident or are likely to occur with seasonal changes. Should the survey indicate bacteriological examination of the proposed bathing and swimming waters is justified, then a series of samples of such water are collected for laboratory analysis. The results of both sanitary and bacteriological surveys are considered jointly; and if such results are satisfactory, and when the requirements are complied with relating to proper sanitary facilities to serve the place, a permit is issued which so long as standards are adhered to remains valid. The field work pertinent to this procedure is usually done by engineers and sanitarians of local health departments and field engineers of the bureau.

PUBLIC WATER SUPPLY WELLS

During 1957 there were a total of 177 permits issued for construction of new wells for public water supplies in the state. This is slightly less (about 10 per cent) than the number of such permits issued in the previous year. Distribution of the water well permits by counties is seen in Table 39.

BOTTLED DRINKING WATER

Included in the data of Table 39 is seen the listing of number of bottled drinking water operation permits in each county where one or more such establishments were permitted during the year. A total of 27 of these permits were issued, including four for out-of-state plants.

The policy to rely upon reports by the respective state health departments involved on out-of-state drinking water bottlers distributing products in Florida, was continued as in past years.

COMMON CARRIER WATER SANITATION

Through a cooperative agreement with the U. S. Public Health Service, and on the basis of Service quarantine regulations and drinking water standards, the program for sanitary control of potable and culinary water on common carriers was continued in 1957. This has to do with the sources of supply and the facilities for placing water aboard railway trains and vessels operating in interstate traffic. Field work involved was accomplished by health department personnel in the state,

at regional and local levels; with the results being reported to and the activity coordinated by central office. Such reports served as bases of recommendations of the department to the Public Health Service regional office in Atlanta for approval or disapproval, as the case may be, and appropriate certification by that agency. There are some details of this activity listed as follows:

The number of watering point inspections in 1957, with reports to Public Health Service, were: Railway watering points, 20; Vessel watering points, 47. Reports on water supplies serving these watering points were completed and forwarded to the Service: Municipal systems, 17; Private systems, 4. Common carrier watering point classification or status (as recommended to the Public Health Service):

	Approved	Provisional	Prohibited	Pending	No Current Report	Totals
Railroad	20	0	1*	—	3	23
Vessel	47	1	1**	—	18	67
Totals	67	1	1	—	21	90

* — Later approved and is listed under approved column

** — Recommended be deleted

EDUCATIONAL AND PROFESSIONAL ACTIVITIES

Training of water plant and public swimming pool operators continued to receive the department's attention during the year through sponsorship of in-service training courses.

Regarding this aspect of training of water works people, the 25th Annual Short School for Water and Sewage Operators held at the University of Florida in the period May 27 — June 1 was the outstanding activity of the year. The Short School was again held under the auspices of the State Board of Health, the General Extension Division of the University, and the Florida Water and Sewage Works Operators Association in cooperation with Florida Section AWWA and Florida SIWA.

The policy was continued whereby the programs of instruction were limited to Class A and Class B work, thereby enhancing the possibility of professional betterment and training of those water works operation personnel who wish to advance. (This leaves the more elementary in-service training to the regional short courses which are conducted at vantage points over the state.)

WATER WORKS OPERATORS SHORT SCHOOLS

Place or Area	*Attendance	Voluntary Examination and Certification	
		No. Taking Exam	No. Passing Exam
Tampa-St. Petersburg	125 (Grade "C" Water)	18	10
Jacksonville	80 (Grade "C" Water)	5	3
Ocala	37 (Grade "C" Water)	5	2
Tallahassee	41 (Grade "C" Water)	7	3
Gainesville	178 (both) (Grade "B" Water)	25	14
Gainesville	(Grade "A" Water)	7	2

* Combined water and sewage operators groups

It is seen that in addition to the full one-week short course held at Gainesville for B-Grade and A-Grade work, the regional courses were held in the same general localities as the previous year. An exception was the Miami area or region, where the short course was postponed to early 1958.

A good measure of success continues with voluntary certification of water plant operators. It is seen from the tabulated data, however, that a large proportion (49.3 per cent) of those operators taking the examination looking to certification did not successfully complete it. This situation also prevailed in the previous year (52 per cent failed). This is indicative of lack of study and preparation down through the year prior to participating in the short course; and policy has been adopted requiring candidates for examination for "B" and "A" certification to successfully complete certain correspondence courses (or the respective examinations related to such correspondence courses) before being admitted to the examination to be held at the annual short course at University of Florida in 1959. (Note that 50 per cent of "A" Grade and "B" Grade candidates failed the examinations at the 1957 Annual Short Course, which was not a great improvement over the results of the previous year when some 62 per cent of such candidates also failed the examinations.)

Continuing the promotion and sponsorship of in-service training in the field of public swimming pool operation, short schools were again held during the year in Dade and Broward Counties. These courses were sponsored by the respective county health departments in cooperation with Florida Swimming Pool Operators' Association (Dade and Broward County Sections). The central office assisted in developing course material, with lectures, and preparation of examinations and processing for voluntary certification of operators successfully completing same. The Fifth Annual Short Course was held at Miami in February 1957; and the Second Annual Short Course was held at Fort Lauderdale in April 1957.

SWIMMING POOL OPERATORS' SHORT COURSES

Classification	Miami Area		Ft. Lauderdale Area		Totals	
	Number Examined	Number Passing	Number Examined	Number Passing	Number Examined	Number Passing
Superior	11	2	0	0	11	2
Advanced	14	12	6	2	20	14
Satisfactory	32	24	17	3	49	27
Totals	57	38	23	5	80	43

The relatively small proportion (53.75 per cent) of pool operators successfully completing the examinations who took them is indicative of the need to further stimulate "home-study" or correspondence work among pool operators down through the year between short courses. This, together with other features of public pool operation betterment, needs more attention of the department than can be given under current circumstances by personnel whose part-time has been devoted to it.

Many conferences and meetings were held with municipal, county and state officials and with officials of utilities, and their consulting engineers relative to the planning, design, construction and operation of water works proposed for service or serving the public.

TABLE 38

SUMMARY OF WATER SUPPLY PROJECTS APPROVED — 1957

COUNTIES	No. of Projects	Capacity Increase MGD	ESTIMATED COSTS		
			Distribution	Water Supply	Total
Baker	2	1.150	\$ 110,000	\$ 100,000	\$ 210,000
Bay	1		5,000		5,000
Brevard	36		55,000	752,665	807,665
Broward	66	8.546	2,671,448	1,188,172	3,859,620
Charlotte	2		19,000	115,000	134,000
Clay	1		10,625		10,625
Collier	3	0.575	102,438	7,650	110,088
Dade	75	24.029	4,375,621	2,530,900	6,906,521
DeSoto	1		55,502		55,502
Dixie	1			4,000	4,000
Duval	48	10.794	770,861	349,836	1,120,697
Escambia	2	0.720	158,264	11,200	169,464
Hernando	2	1.440	110,000	70,000	180,000
Highlands	2		12,500	16,000	28,500
Hillsborough	15	0.502	1,408,700	415,000	1,823,700
Holmes	1			25,000	25,000
Indian River	4		115,315	273,884	389,199
Jackson	1		7,241		7,241
Lake	8	1.590	99,500	10,000	109,500
Lee	2	0.863	46,000	9,000	55,000
Leon	1	0.180	9,688	500	10,188
Levy	1		96,500	13,500	110,000
Manatee	14		190,938	40,000	230,938
Marion	2		144,561		144,561
Martin	3	0.650	147,150	240,000	387,150
Monroe	2		62,465		62,465
Nassau	1	1.440	10,250	49,700	59,950
Okaloosa	2	0.863	218,041	103,000	321,041
Okeechobee	2	0.350	91,459	105,350	196,809
Orange	20	2.295	386,733	1,264,503	1,651,236
Palm Beach	51	19.985	1,421,430	3,074,089	4,495,519
Pasco	7		26,569	2,500	29,069
Pinellas	52	2.316	853,816	108,000	961,816
Polk	5	5.772	16,027	185,000	201,027
St. Lucie	1		59,000		59,000
Santa Rosa	2	5.760	358,000	42,100	400,100
Sarasota	9	2.001	76,347	21,375	97,722
Seminole	6	0.288	14,560	7,400	21,960
Sumter	1	1.000			90,000
Suwannee	1			180,000	180,000
Volusia	11	2.160	247,870	1,031,675	1,279,545
TOTALS	467	95.270	\$22,575,627	\$11,839,330	\$34,414,957

For a detailed listing of the projects in each county, which are summarized above, please write to the Bureau of Sanitary Engineering.

TABLE 39

PERMITS ISSUED FOR SWIMMING POOLS, NATURAL BATHING PLACES, BOTTLED WATER PLANTS, WATER WELLS AND DRAINAGE WELLS; PLANS APPROVED FOR PROPOSED PUBLIC SWIMMING POOLS, BY COUNTIES 1957

COUNTY	PERMITS ISSUED						Plans approved for Proposed Public Swimming Pools	
	Swim- ming Pools**	Natural Bathing Places**	Bottled Water Permits	Water Supply Wells	Swim- ming Pools	Drain- age Wells	Number	Estimated Cost
STATE	1,159	51	27	177	231	354	329	\$5,638,904.00
Alachua	5	2	1	...	1	...	2	112,000.00
Baker .....	...	...	...	1	...	...	4	34,900.00
Bay	2	1	...	...	2	...	2	17,000.00
Bradford	2	...	...	6	1	...	5	36,500.00
Brevard	6	...	...	8	102	20	69(**)	768,167.00
Broward	309	2	2	...	...	...	...	...
Calhoun .....	...	...	...	1	...	...	2	86,000.00
Charlotte .....	...	...	...	1	...	...	...	...
Clay	2	8	...	1	1	...	2	21,050.00
Collier	2	...	...	2	1	...	1	10,250.00
Columbia	4	...	...	9	46	285	54(**)	890,262.00
Dade	470	2	3	1	...	...	...	...
Dixie .....	...	...	1	10	4	...	12	151,100.00
Duval	20	...	1	4	5	...	1	15,000.00
Escambia	5	1	...	...	...	...	...	...
Franklin .....	...	1	...	1	...	...	...	...
Gadsden .....	...	...	...	2	...	...	...	...
Gulf .....	...	1	...	...	...	1	...	...
Hamilton .....	...	...	...	...	...	...	...	...
Hardee	2	...	...	...	1	...	...	...
Hendry .....	...	...	...	2	...	...	1	9,000.00
Hernando	1	1	...	1	...	...	3(**)	45,250.00
Highlands	6	7	1	13	...	5	4	18,000.00
Hillsborough	3	...	1	1	...	...	...	...
Indian River .....	...	...	...	2	...	...	2	30,750.00
Jackson	9	1	...	6	2	2	2	18,680.00
Lake	10	...	1	1	1	...	2	70,000.00
Lee	5	3	...	3	1	...	2	23,200.00
Leon	1	...	...	...	1	...	...	...
Levy .....	...	2	...	...	...	...	...	...
Liberty	1	...	...	...	1	...	3	70,000.00
Madison .....	...	1	1	6	...	...	10	83,180.00
Manatee	21	3	...	2	4	5	...	...
Marion	3	...	1	2	...	...	5	72,000.00
Martin	10	...	...	...	2	...	1	10,000.00
Monroe	2	...	...	1	...	...	2	90,000.00
Nassau	1	...	...	3	1	...	8	190,000.00
Okaloosa .....	...	...	...	1	...	...	...	...
Okeechobee	14	1	1	29	5	18	...	...
Orange .....	...	...	...	1	...	...	23(**)	897,761.00
Osceola	50	1	3	6	...	3	4	526,982.00
Palm Beach	1	...	...	10	19	...	45	51,500.00
Pasco	78	3	2	10	3	2	5(**)	...
Pinellas	13	3	...	10	1	1	...	...
Polk	2	...	...	...	3	...	7	96,000.00
Putnam	12	...	...	...	...	...	5	162,000.00
St. Johns	9	...	...	2	...	...	1	20,000.00
St. Lucie .....	...	...	...	...	5	3	...	156,800.00
Santa Rosa	23	1	2	9	...	...	8	34,000.00
Sarasota	4	4	...	4	...	1	3	20,000.00
Seminole	1	...	...	...	...	1	2	...
Suwannee	2	...	1	1	1	...	...	...
Taylor	41	...	2	8	14	3	31	811,822.00
Volusia	1	1	...	...	1	...	...	...
Wakulla .....	...	1	...	...	...	...	...	...
Washington .....	...	...	4	...	...	...	...	...
Out of State .....	...	...	...	...	...	...	...	...

**—Accumulative or Continuous
(**)—Local County Approvals

SEWAGE AND INDUSTRIAL WASTES

JOHN W. WAKEFIELD, M.S. Eng.
CHARLES E. COOK, C.E.

Florida Statutes make it unlawful to deposit in any of the lakes, streams, canals, ditches and coastal waters under the jurisdiction of the State of Florida, any wastes or substances liable to affect the health of persons, fish, or livestock. The supervision of these regulations is the responsibility of the State Board of Health. This bureau through its Sewage and Industrial Wastes Section, controls the collection and treatment of liquid wastes and places into effect the Board's Stream Pollution Control and Abatement Program. This section not only deals with strictly public health problems involving the many kinds of wastes associated with present civilization's way of life, but also with the involved economic and esthetic factors.

The problems of pollution are not new; they are as old as civilization itself, but the explosive growth of the state's population creates many demands on the resources of the natural waters of this state. The pollution of water is a natural result of water use. The program in water pollution control is based on adequate treatment of wastes by municipalities and industry to assure that receiving waters and stream use will not exceed the organic waste assimilating capacity of the waters or exceed the right of the user to a fair share of the stream's assimilating capacity. This can only be assured and protected by constant watchfulness and detailed physical, chemical and biological surveys. The review and approval of sewage and industrial waste plans for contemplated projects is a definite control measure. This work grows in quantity and complexity with the population growth and technological advancement.

Progressive and adequate pollution control can only be assured through cooperative planning in the development of a state water resources program. An outstanding achievement was the passage, by the 1957 Legislature, of a Water Resources Law creating a Department of Water resources under the State Board of Conservation. The creation of such a department was one of the recommendations of the Florida Water Resources Study Commission which completed its two year study early in 1957. The new law permits the State Board of Conservation to authorize local governmental units to store, divert, and use surplus surface and underground waters, and the Board may also, under sufficiently demanding conditions, create conservation districts within which the use of surface and underground waters may be regulated. The Water Resources Law does not correct all of the deficiencies noted by the Water Resources Study Commission, nor does it comply with all of the recommendations of the Commission. It is, however, a decided step forward and it paves the way toward a comprehensive water resource plan.

An appropriation of \$135,000 from the general revenue of the state for the next biennium (1957-1959) was approved. John W. Wakefield, Chief of the Sewage and Industrial Wastes Section for many years resigned from the State Board of Health and was appointed Director of the Department of Water Resources on October 15, 1957.

Progress in the field of sewage and industrial wastes during 1957 was in many instances gratifying. Plans were submitted near the close of the year for the first increment of a municipal sewerage improvement project for the City of Jacksonville, thus beginning the elimination of the one remaining metropolitan area disposing inadequately treated sewage to a natural waterway. There is every indication that construction on this project will go forward during the next year. For a number of years, mention has been made in these annual reports of the need for sanitary districts in urban-suburban areas. Although permissible legislative means are available, county officials have been reluctant to create sanitary districts due to financial difficulties. However, during 1957, preliminary engineering reports were received for a sanitary district to serve the Ortega Peninsula area in Duval County. A county-wide survey was made in Pinellas County to determine areas feasible for sanitary districts and a small portion of one selected area was under construction. Results of a similar survey were published for the Gainesville area and its environs.

Comparable achievements were also seen in the field of industrial wastes. For many years Bayou Chico, Escambia County, has been subjected to improperly treated wastes. Pollution surveys and reports have been prepared by the bureau almost annually since 1950. Numerous conferences have been held with officials and many complaints received from citizens of the area. During 1957 the two major industrial plants contributing wastes to this Bayou embarked on improvement projects to remove much of the organic waste material now reaching these waters. This constitutes the first stage of a development which should eventually provide adequate treatment for these industrial wastes. Rapid industrial development continued in the state with the installation of the Glenn L. Martin Company plant in Orange County and the Pratt-Whitney Company plant in Palm Beach County as two notable examples.

The rapid industrial growth of the Escambia-Santa Rosa area is also noteworthy. The latest newcomer to this area is the acrylic fiber plant of the American Cyanamid Company. In Pinellas County, industrial plants have been constructed by General Electric, Minneapolis-Honeywell, Sperry Rand and Hamilton Standard, all within recent years. It can reasonably be expected that the state will continue to attract many industrial plants.

The mining industry in the Peace and Alafia River Valleys continues to develop with a new triple superphosphate plant completed in 1957 at Brewster. New citrus canning and concentrate plants have been placed in operation at Cape Canaveral in Brevard County, and near Dade City in Pasco County. These, together with the multitude of sewerage projects for which plans have been approved in 1957, continue

to indicate the need for increased activity in the water pollution control field.

Two developments in 1957 point the way toward eventual improvement in pollution control: the construction of a functional laboratory building at Orlando and the authorization by the Legislature to construct and operate a stream pollution laboratory in Polk County are great strides toward providing the physical facilities required by an adequately controlled program. These, together with the purchase of both mobile and fixed laboratory equipment from funds granted under Public Law 660 through the U. S. Public Health Service, have for the first time placed this section in the position of being richer in equipment and laboratory facilities than in personnel to man them.

SEWAGE WASTES

The growth of sewerage systems within the state are graphically shown in Figures 6 and 7 of this report. During 1957 a total of 427 projects were received for review toward approval. Plans for 12 municipal sewage treatment plants were approved which on completion of construction can eventually serve a design population of 116,000 people. The estimated cost of these 12 municipal plants is \$3,178,000. In addition, plans were approved for 33 subdivision sewage treatment plants to serve a future potential population of 55,261 persons at an estimated total cost of \$2,095,130.

The total estimated cost of all sewerage projects approved during the year was \$35,784,064, which provided new treatment capacity facilities for 264,263 additional persons with collection facilities having capacity for 521,374 persons. By reference to Figure 6, it may be seen that the capacity of sewage collection systems are approaching the design capacity for sewage treatment. An important factor, however, is that the population increase for the state during the year 1957 was estimated as 362,400 persons or an 8.6 per cent increase. Sewer collection facilities have increased 23.5 per cent and the design capacity of new or enlarged sewage treatment plants increased 10.0 per cent.

Sanitary sewers are now available for serving 52.4 per cent of the state's population while the design capacity of sewage treatment plants is capable of serving 62.6 per cent of the population. Considering the fact that new sewage treatment plants and in some instances collection systems are normally designed not only for present population but for estimated population to be served 15 to 20 years after plant construction, it is readily seen that treatment provisions for sewage are barely keeping pace with population increase. The present rate of construction of sewerage works must be considerably increased if the remaining unsatisfactory sewerage conditions are to be soon eliminated.

There are now 232 sewage treatment plants operating within the State, with 35 new plants under construction. Figure 8 shows a small decrease in operating plants due to deleting from these data the small

sand filter installations for public buildings, etc., which were formerly tabulated as sewage treatment plants. This steady increase in number of operating sewage treatment plants is of growing concern to this bureau in regard to adequate supervision of operation. Operating plants submitted over 700 monthly operation reports which were received and reviewed by staff members. However, only 90 plants, or 39 per cent, in operation submitted these reports.

This growth in sewerage facilities definitely requires corresponding growth in technical personnel by the regulatory agency. At present the three engineers assigned to sewerage projects are occupied practically full time on review of plans.

Field investigations in sewerage were necessarily limited during the year due to other demands. The following surveys were conducted:

1. Infiltration tests — North Bay Village
2. Efficiency Survey — General Electric Sewage Treatment Plant (March)
3. Efficiency Survey — General Electric Sewage Treatment Plant (October)
4. Highlands Subdivision Sewage Treatment Plant Survey
5. Efficiency Survey — Town & Country Shopping Center Sewage Treatment Plant
6. Efficiency Survey — Jacksonville Beach and Fernandina Beach Sewage Treatment Plants
7. Efficiency Survey — Cedar Hills Sewage Treatment Plant
8. Ft. Myers Sewage Treatment Plant investigation
9. Duval County School Sewage Treatment Plant investigation
10. Osceola Subdivision Sewage Treatment Plant

The activity by cities applying for participation in the construction grant program for needed sewage treatment facilities under Public Law 660 has added considerably to the work load of the section personnel. The following is a summarized statement for the overlapping periods during 1956-57 and 1957-58:

FISCAL YEAR — 1956-1957

Federal Allotment: \$910,775.00

Number applications received: 38

Estimated cost of overall projects: \$55,912,939.55

Portion eligible under Public Law 660: \$20,944,160.16

Federal grants requested: \$5,014,392.29

Per cent of overall costs for which grants were requested: 8.9 per cent

Priority points were awarded based on the public health necessity, per capita cost of the facilities and wealth of the community. Of the 38 applications received, 11 were made offers by the surgeon general through the U. S. Public Health Service. The offers totaled \$905,640.00, leaving an unencumbered balance of \$5,135.00 in the first year's funds. Offers were made to and accepted by: Wauchula, Wildwood, Apalachicola, Naples, Belleview, Callahan, Cocoa Beach, Belle Glade, Lynn Haven, Okeechobee and Inverness.

Only one project (Naples) is under construction, which prompted the State Board of Health to adopt the policy that if an applicant has accepted the offer of a Federal grant and fails to have the facilities under construction by June 1 of each year, the allocation will be withdrawn and the funds shifted to projects ready to begin construction. As far as the state is concerned the applicant retains his priority and will be reconsidered the next fiscal year if ready to begin construction and funds are appropriated by Congress.

FISCAL YEAR — 1957-1958

Federal Allotment: \$907,550.00

Number of applications received: 21 (Of these, four were new applications, and 17 were letter requests from unsuccessful applicants under the 1956-1957 allotment to reconsider their original application.)

Estimated cost of overall projects: \$34,754,816.00

Portion eligible under Public Law 660: \$14,328,929.28

Federal grants requested: \$3,632,089.21

Per cent of overall costs for which grants were requested: 10.6 per cent

In order to recognize an applicant's readiness to start construction of the proposed facilities, additional priority points were awarded on this basis, in addition to the three previously mentioned. Of the 21 applications received, six applicants were made offers by the surgeon general through the U. S. Public Health Service. The offers totaled \$855,739.44 leaving an unencumbered balance for the year of \$51,810.56. The total unencumbered balance for both years is \$56,945.56. Offers were made to and accepted by: Eau Gallie, Long Key, Perry, New Port Richey, Milton and Fort Lauderdale. The facilities at Eau Gallie, Long Key and Fort Lauderdale are under construction.

These available grants have stimulated sewerage construction and use of the funds if continued to be appropriated by Congress will be increasingly reflected in the state's sewerage construction program.

INDUSTRIAL WASTES

The bureau reviewed and approved plans and specifications for waste treatment facilities for 47 separate industrial projects during 1957.

Consulting engineers' estimates on cost of these facilities totaled \$1,417,320. This represents a decrease of 30 per cent in the number of projects but an increase of over six times that of last year in the estimated cost. The increase in cost reflects the trend from relatively small waste treatment facilities such as laundries and shopping centers to larger plants serving large corporations of the chemical and aircraft industry. Location of these nationally known plants tend to attract other large plants and usually result in many satellite plants around them of a related or service function.

Among the new plants in 1957, which were either completed or under construction, were two aircraft metal plating plants, one in Orlando and one in West Palm Beach; a large chemical company at Pensacola; three large shopping centers: Fort Lauderdale, St. Petersburg and Miami Beach. A new triple superphosphate plant was built at Brewster. Several of the existing chemical industries and the pulp and paper mills, as well as phosphate industries, have continued to expand their production.

In the field of industrial wastes, especially as the number of plants having complicated waste products increase, there is the need for constant and alert health department observation of their operation. Periodic surveys with analysis of wastes through automatic sampling equipment should be conducted to determine efficiency of treatment and safeguard the receiving diluting waters. Many of these plants are now using radiological isotopes in their research and testing procedures. Surveys of streams and other waters in advance of plant location would render significant information and fix responsibility for subsequent damage.

Technical personnel of the section devoting full time to industrial wastes problems will consist of two chemical-sanitary engineers, assisted by the staff biologist and two chemists. One of the engineers is on educational leave and is due to return June 1, 1958. The second engineer joined the staff on November 1, 1957. The work load in review of plans is shown in Table 41.

STREAM SANITATION

As long as the waters of streams are used by industry or cities for the disposal of waste materials there will be problems in stream pollution. It is recognized and accepted that one of the most important uses of water is for carrying away waste materials. The mining and processing of phosphate, the concentrating of citrus juices, and the conversion of wood fibers to pulp and paper are dependent upon large quantities of water which in carrying away waste products cannot feasibly be completely purified. These industries are a part of Florida and probably as important economically as the climate. Waste problems will continue to a greater or less degree as long as these and other type industries exist in the state. High concentrations of fluorides, toxic in nature and excessive acidity are common in the wastes waters of the highly processed phosphate products. These chemicals are harmful to

fish and their food supply and deny normal use of receiving waters to man or livestock.

The Alafia and Peace Rivers used principally by the phosphate industries continued to receive detailed attention during 1957 with little change observed in pollution conditions. Further sampling and surveys were made and reported as "The Peace River, Addendum No. I to Volume II of the Peace and Alafia Stream Sanitation Studies, 1950-1953." Of importance to the area is the addition of the new triple superphosphate plant at Brewster.

Increased industrialization of the Santa Rosa-Escambia Counties' region by the influx of new chemical industries during the past few years has created many problems with a particular need for emphasis on the Escambia River, Escambia Bay, Perdido River and Perdido Bay waters. There also exists an interstate pollution problem in this area caused by the operation of a pulp and paper mill at Brewton, Alabama. A comprehensive survey of Escambia Bay was conducted during 1957 and the responsibility for pollution established. Extensive facilities for partial treatment of heavily polluted wastes from an organic fiber processing plant are under construction and will go far towards eliminating the overload of organic matter on these waters.

The Amelia River in Nassau County and the Fenholloway River in Taylor County, both exempt by legislative action from State Board of Health control, continue to be, as reported in previous years, grossly polluted with pulp and paper mill wastes. A pollution survey of Rice Creek in Putnam County, completed in 1957, revealed industrial waste pollution by the pulp and paper mill beyond a fair use, with detrimental effects to and beyond the confluence of the Creek with the St. Johns River. Chemical engineering consultants for this industry, in conference with this bureau, gave reasonable assurance that early efforts would be instituted towards abatement. A survey of Cedar Creek in Duval County revealed considerable waste pollution by three industries consisting of a railroad shop, used oil refinery, and a poultry processing plant. Copies of this survey with request for stream pollution abatement measures have been delivered to these firms. This stream also receives some treated sewage disposal, effluent from several subdivision sewage treatment plants and many individual sewage disposal systems, which also contribute some pollution to its waters.

The program of measuring and recording background radiation levels of the surface and underground waters of the state has been initiated during 1957. This will be a most extensive and time consuming study to serve as a baseline in detecting any unnatural changes or evidence of radiological contamination brought about by the increased use of radioactive material within the state. This program is vital to the control of any radioactive waste producing substances and is imperative to safeguarding the health of the people. Late in the year two internal proportional counters were purchased and installed in the engineering laboratory in Jacksonville. Calibration of this equipment has been completed

and samples from approximately 40 municipal ground water supplies have been analyzed. These studies will be accelerated during the coming year in cooperation with the universities of the state to obtain rapid statewide determinations.

Active investigations on determining the effect of nutrients from waste sources on receiving waters and the relationship of the enriched waters on the productivity of mosquitoes and midges was carried forward in cooperation with the Bureau of Entomology at the temporary Winter Haven laboratory. Chemical and biological analyses and biological identifications were made on 19 lakes in the Winter Haven area.

Numerous physical examinations of various waters, lakes and streams were made following reports of fish kills and other complaints received concerning stream or lake pollution.

The office and field staff assigned to stream pollution activities was far too limited to adequately keep pace with the problems and investigations. At the end of the year available staff for supervision of industrial wastes and stream sanitation consisted of one chemical engineer in the central office, one chemical engineer on educational leave, three sanitary chemists and two sanitary biologists.

Personnel will be needed to staff the new Orlando laboratory now under construction to serve the South-Central area of the state. This laboratory will greatly implement the control activity of all phases of stream pollution. In this area are found many of the principal river and stream basins of the state as well as heavy concentrations of industries including practically all of the phosphate and citrus plants. Stream surveys have been very fragmentary and intensive studies on a long flow period are considered mandatory if proper control measures are to be exercised.

DRAINAGE WELLS

Applications for official approval or permits for the construction of drainage wells were received in approximately the same number during 1957 as in the previous year. Permits were issued for a total of 354 drainage wells of which 285 or 80 per cent were drilled in Dade, 20 in Broward, and 18 in Orange County. These accounted for approximately 91 per cent of the total permits issued. The remaining nine per cent were issued for construction within 12 other counties. With few exceptions the permits for Dade and Broward Counties were issued for drainage to receive only uncontaminated water from closed air conditioning systems and for chlorinated swimming pool water.

The surface drainage problem existing in Orange County becomes more acute annually. Drainage wells permitted within this county were in the greater part for storm surface water run-off within the greater Orlando area. A cooperative attempt through conferences with the Orlando city officials, the Chamber of Commerce and the state geologist, was made to restrict additional drainage wells for receiving polluted

waters within this area. The present policy for disposing of this storm water is by receiving lakes with lake level controlled by a drainage well. For each permit issued there will be an earnest attempt to eliminate one or more existing wells. The area of Orlando is simply increasing in density of persons to the extent that very little area is available for receiving and sedimentation lakes prior to the polluted water reaching the drainage well. The great need in this specific area is a master overall drainage system throughout to permit surface drainage waters reaching the natural channels of the Little Econ, Wekiva Rivers and Shingle Creek.

Rigid opposition continues as standard policy to the discharge of sewage or industrial wastes to drainage wells. Progress has been made toward eliminating the drainage wells used by Live Oak and Wildwood for receiving untreated sewage wastes. Wildwood is now apparently ready to award a contract for the installation of approved sewerage. A few industries, principally in the Orlando and Miami areas, continue to use drainage wells for the disposal of some untreated wastes. Drainage wells for receiving waters polluted to any extent are a definite menace to underground water supply.

EDUCATIONAL AND ORGANIZATIONAL ACTIVITIES

Personnel of this section participated in the planning and acted as instructors in four regional short courses and the annual short school at the University of Florida for water and sewage plant operators. The State Board of Health now has full responsibility for the examination and certification of operators, and during 1957 there were 66 examinations given and the following certificates issued:

Sewage Treatment Plant Operator Class A, 4; Class B, 8; Class C, 31.

The number of certified operators now holding certificates in sewage are as follows:

Sewage Treatment Plant Operator Class A, 12; Class B, 66; Class C, 198.

If proper distribution existed, with the total operating plants standing at 232 sewage treatment plants, there is available at least one certified operator for each plant. However, many plants do not have a certified operator, where others have more than one.

A workshop on industrial wastes was held at Florida Southern College in Lakeland, sponsored jointly by the Florida Sewage and Industrial Wastes Association and the State Board of Health. Although attendance was limited by available space, there were 45 participants representing 23 industries, exclusive of the staff of instructors and consultants.

The workshop was unique through its approach to the problem of presenting a diversified program of interest to a number of widely varying industries and resulting in comparative studies of individual industries by the participants themselves.

TABLE 40
SUMMARY OF PUBLIC SEWERAGE PROJECTS
APPROVED IN 1957

County	No. of Projects	DESIGN POPULATION	ESTIMATED COSTS		
			Sewers	Lift Stations	Plant
ALACHUA	3	3,296	\$ 37,500	\$ 10,000	\$ 165,000
BAKER	2	1,802	108,000	37,000	82,000
BAY	2	1,163	70,730	66,460	137,190
BREVARD	23	23,681	749,398	186,152	1,386,534
BROWARD	39	84,018	4,360,715	460,943	5,806,658
CHARLOTTE	2	3,275	311,330	1,279,903	311,330
DADE	46	309,581	4,555,233	228,407	6,419,574
DUVAL	48	36,023	923,983	93,285	1,826,921
ESCAMBIA	9	30,948	727,511	11,604	891,796
GADSDEN	1	127	36,125	243,933	47,729
HILLSBOROUGH	18	54,048	1,045,777	9,000	1,289,710
JACKSON	2	624	54,850	70,862	54,850
JEFFERSON	1	400	6,240	121,473	6,240
LEE	1	53	167,544	1,500	359,879
MANATEE	4	2,519	236,741	117,600	327,378*
MARION	5	19,050	217,011	50,000	436,350
MARTIN	2	2,620	98,260	5,500	243,260
MONROE	2	613	3,000	52,000	8,500
OKALOOSA	1	4,000	413,850	102,000	50,000*
OKEECHOBEE	2	35,294	700,777	342,750	669,740
ORANGE	30	200	5,961,006	202,718	1,490,591
OSCEOLA	15	49,046	1,946,110	6,990	7,249,790*
PALM BEACH	1	82,754	389,052	5,000	3,625,144*
PASCO	36	2,829	1,946,110	5,000	556,012
PINELLAS	6	178	5,282	12,000	11,000
POLK	1	300	5,282	12,000	83,100
ST. JOHNS	1	1,335	9,419	49,500	22,919
SARASOTA	5	1,426	96,400	37,000	145,900
ST. LUCIE	2	3,300	115,600	13,500	242,600
SEMINOLE	5	12,500	200,000	13,500	390,000
SUMTER	1	1,120	84,349	13,500	190,000
TAYLOR	3	81	84,349	13,500	40,000
VOLUSIA	3	81	84,349	13,500	137,849
MISCELLANEOUS PROJECTS WITHIN STATE WITH AVERAGE COST LESS THAN \$10,000	81	.....	.....	.....	690,320*
TOTALS	403	.....	\$23,704,013	\$3,676,107	\$7,523,010
					\$35,784,064

* Certain of the projects are shown only in the totals. Information was not available at time this summary was compiled as to whether the money was allocated to sewers, lift stations, or plants. Project description and location within county are available on request to Bureau of Sanitary Engineering, Florida State Board of Health.

TABLE 41
INDUSTRIAL WASTES PROJECTS APPROVED IN 1957

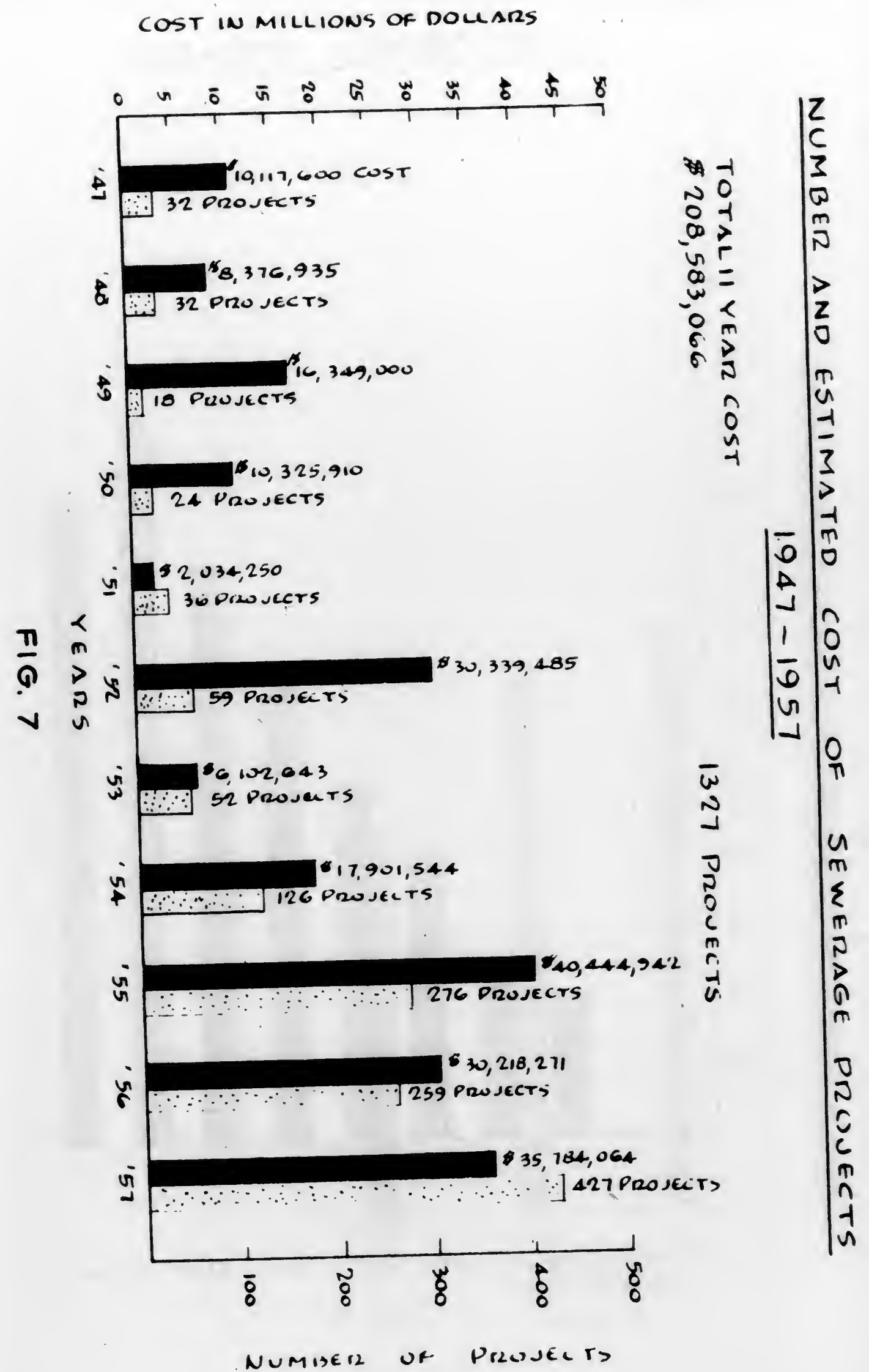
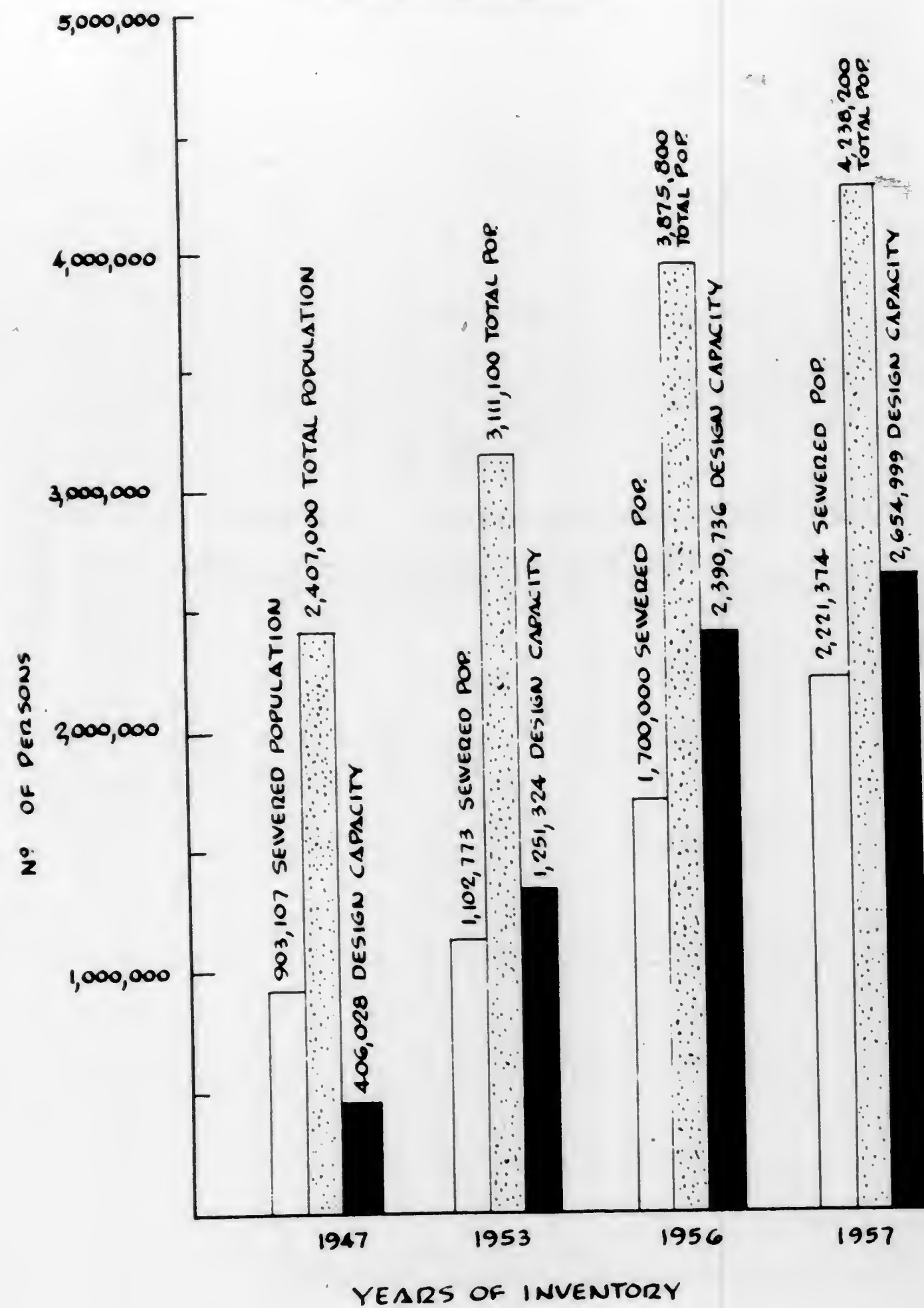
County	No. of Projects	Estimated Cost
ALACHUA	1	\$ 5,000
BROWARD	8	61,800
DADE	23	111,820
DUVAL	6	25,200
ESCAMBIA	1	589,000
ORANGE	1	200,000
PALM BEACH	2	365,000
PINELLAS	2	48,500
SARASOTA	3	11,000
TOTALS	47	\$1,417,320

Project description and location within county are available on request to Bureau of Sanitary Engineering, Florida State Board of Health.

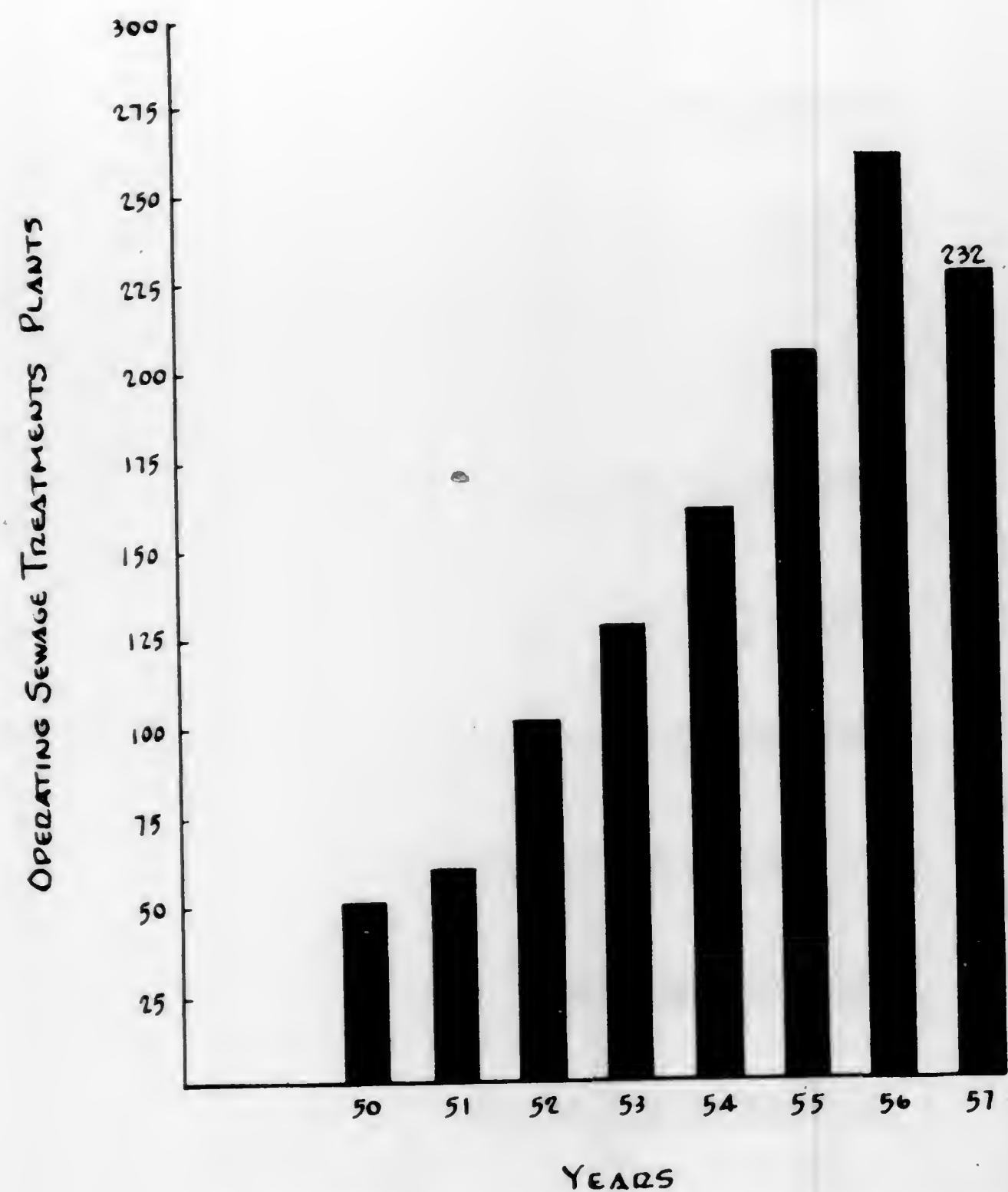
TABLE 42
LABORATORY ANALYSIS STREAM SANITATION IN 1957 —
SEWAGE AND INDUSTRIAL WASTES

	D.O.	B.O.D.	pH	Solids	Fluoride	C.O.D.	Chloride	NO ₃ , NO ₂ , NH ₄	Radiologicals	Phosphates	Bacteriologicals	Biologicals	Miscellaneous
Number of Samples	1,809	1,467	1,245	1,491	42	24	227	132	40	243	514	3,000	71

FIGURE N° 6
PROGRESS OF SANITARY SEWERAGE
IN FLORIDA



OPERATING SEWAGE TREATMENT PLANTS
IN FLORIDA- 1950-1957



*THIS FIGURE EXCLUDES SEPTIC TANK SAND FILTER INSTALLATIONS

FIG. 8

TOTAL PROJECTS APPROVED
1954 ~ 1957

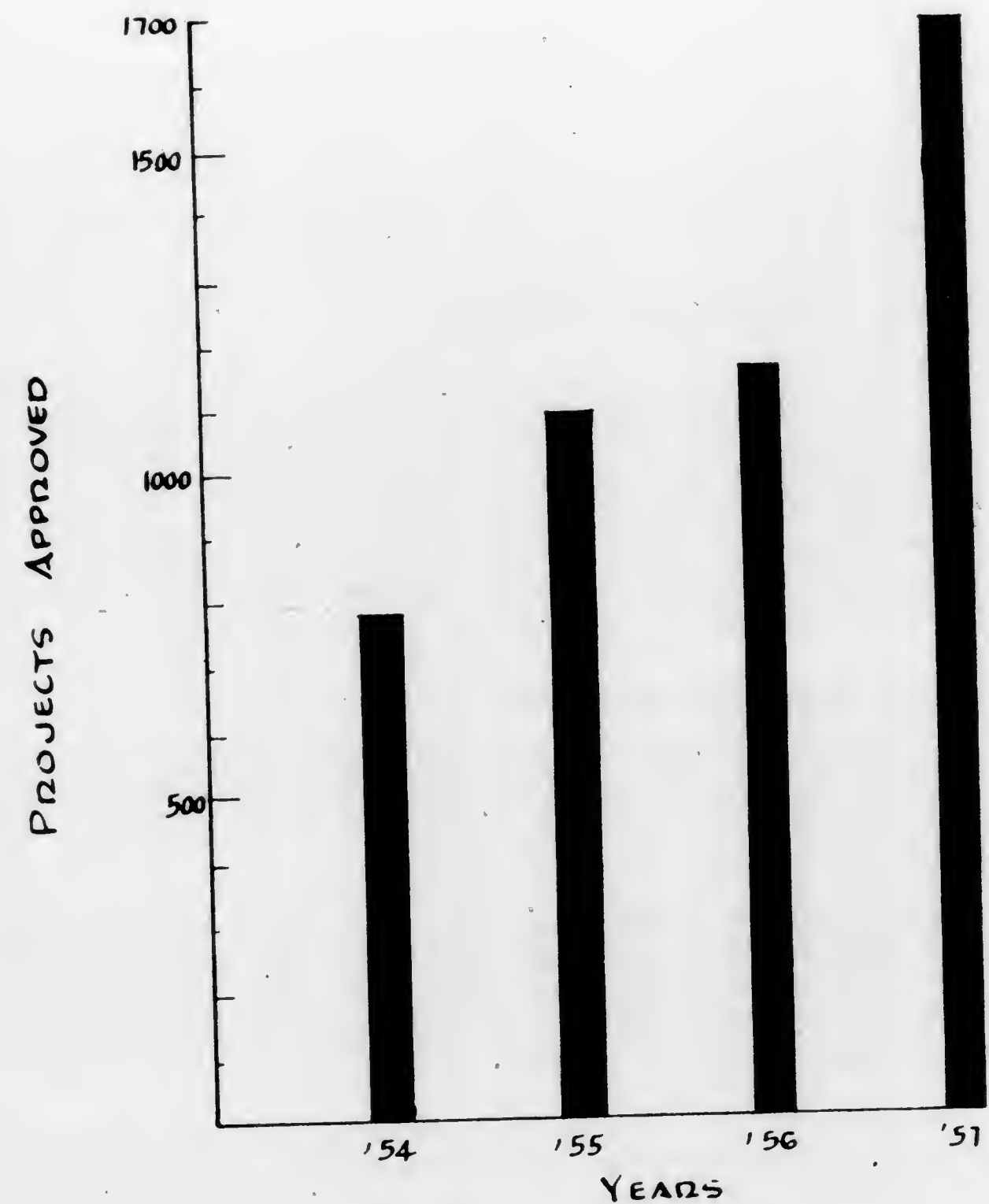


FIG. 9

ENVIRONMENTAL SANITATION SECTION

CHARLES E. COOK, C.E.

This section in 1957 centered its activities around four major problem areas: 1. food sanitation; 2. subdivision sanitation (fringe area development); 3. community sanitation related to specific types of operations; and 4. the administration of the Florida Bedding Inspection Act. The above include many activities and programs.

The scope of the activities of this section may be readily observed by the fact that its programs are related to all those factors, excluding municipal sewage and industrial waste and large community water supplies and their treatment, which are involved in the promotion and providing of a fit environment for our citizens. A principal aim was to furnish county health departments with effective technical assistance for the strengthening and implementation of their own programs. The Section endeavored to play a leadership role in the coordination of county sanitation services with those of the central office. A major concern has been the development of consistent liaison with official and voluntary health organizations, allied state agencies, professional societies, industries, institutions and trade associations.

FOOD SANITATION PROGRAM

One of the more important phases of environmental sanitation is the supervision of various food operations because of disease transmission hazards. Effective food control programs are developed through the establishment of acceptable standards of practice, clear and uniform regulations and the consistent application of enforcement and educational techniques. They are pursued with the cooperation of the industries and allied official agencies involved. They also are directed toward the manufacture of safe and wholesome products.

FOOD PROCESSING PLANTS

The food processing plant activities of the section received much more attention than in previous years as is manifested by the closer supervision that is being given by health departments to establishments that fall within this category.

During 1957 food processing plant permits were issued 199 organizations upon the recommendations of county health departments. This is a decrease of 22 permits as compared to 1956. Among the factors responsible for this decrease is the fact that food processing operations are being scrutinized even more closely than before.

Data furnished in applications submitted for permit issue reveal a trend that the food processing industry is going to hold a more significant place in the state's economy. They also demonstrate that the range of the types of processed foods may be anticipated to become more extensive.

The section plans in the coming year to develop informative food processing literature and educational programs to assist county staffs in their current needs.

As a result of food-borne disease outbreaks involving commercially prepared sandwiches, Chapter XI of the State Sanitary Code was revised to include the control of these manufactured products. Liaison has been maintained with the State Department of Agriculture in the section's food processing sanitation activities. In accordance with current practice, the production data and sanitation status of permitted Florida food processing plants were furnished out-of-state health authorities as requested.

Food Processing Plant Permits Issued 1957

County	Number	County	Number
Dade	58	Palm Beach	6
Duval	1	Pinellas	55
Hillsborough	32	Polk	5
Jackson	1	St. Lucie	3
Lee	1	Sarasota	6
Manatee	9	Volusia	21
Martin	1		
Total:		199	

SHELLFISH AND CRUSTACEA ESTABLISHMENTS

The sanitary control of shellfish and crustacea products is maintained by the regulation of growing areas and processing plants. The year 1957 saw the consolidation of gains that had been made in 1956 and an increased desire on the part of producers to meet minimum sanitation standards. It also revealed an extension of county health department participation in these aspects of sanitation activities.

A total of 87 shellfish production certifications were issued in 1957. Although oyster production is centered in the Apalachicola area where 28 shucking and packing plants and one shellstock establishment operated, a marked contrast may be observed in the 22 certifications issued in Bay County where there are 12 shellstock operators, three shucking and packing plants that process oysters solely and seven that fall in a category in which both shucked oysters and scallops are permitted to be produced. Among the reasons for the number of certificates awarded in Bay County, is the close supervision that is being given the production of shellfish by the county health department and the fact that the quantity of oysters and scallops available for gathering and processing has increased significantly. Furthermore, seed oysters are being planted by the State Department of Conservation each year with the result that new oyster bars are being created. At the present time, scallops are being harvested at the rate of \$50,000 worth a week in this county, during a season that varies in length from six to ten months.

The vigilance that was exercised over oyster growing areas throughout the state was coordinated with the stream pollution program of the Sewage and Industrial Wastes Section. Twenty-three growing areas are in the "condemned" classification due to the polluted status of their waters. A pollution survey of the Spring Creek growing area in Wakulla County for a nine month period in 1957 was conducted in which more than 500 samples were collected for bacteriological examination. In addition to the analysis of these waters, the State Department of Conservation examined approximately 30 salinity samples in order to determine the suitability of areas for planting seed oysters. In instances where persons were interested in taking oysters from questionable areas, the territory was checked against current data and information provided by county health departments prior to the granting of permission to engage in this operation.

During 1957 no significant unlawful shellfish operations were reported in Northwest Florida. There are other sections of the state where it is suspected that the illegal gathering of oysters may be of some magnitude. Such activity was noticeable particularly in Brevard, Volusia, Dixie, Duval and Charlotte Counties. One case of illegal crabmeat traffic involved Charlotte and Pinellas County Health Departments and agents of the State Department of Conservation. The Conservation Department polices oyster growing areas and cooperated with the bureau and local health authorities.

Laboratory facilities and services were expanded for the bacteriological examination of oyster growing area waters and oyster, scallop and crabmeat products. The State Board of Health branch laboratories in Tallahassee and Pensacola are now in a position to better serve the seafood industry. The central laboratory in Jacksonville tested 344 crabmeat samples which included 2408 examinations. The Franklin County Marine Laboratory performed a total of 977 analyses, which encompassed the sampling of oysters, crabmeat, growing area waters and the water supplies of shellfish and crustacea establishments. Of this number, 329 tests were run on oyster meat, mud bottoms and bay pollution samples to assist the U. S. Public Health Service Research Center at Pensacola. In areas where crabmeat products are processed, the cooperation of county health departments in the collection and submitting of samples for analysis deserves special mention, because their participation in the routine laboratory checking system that has been developed has resulted in the achievement of more uniform control over this perishable food item. The Departments of Health of the City of New York and the State of Maryland kept the bureau informed routinely on the results of samples of packed Florida crabmeat found on northern markets and tested by their own laboratories. These data and the directives of these agencies were passed on to the county health departments concerned.

In September a memorandum was distributed to county health officers, sanitation personnel, out-of-state official agencies, and the U.S. Public Health Service, in which it was pointed out that out-of-state shellfish

products are required to meet State Sanitary Code specifications in regard to evidence of authorized certification before they may be offered for public sale in Florida. As a consequence, health departments in the course of their inspectional work investigated the source of out-of-state shellfish found in markets, chain stores, grocery stores and similar establishments. This resulted in quantities of shellfish products, especially raw and processed scallops and processed oysters being placed off sale, and called for certification negotiations with official agencies in the states of New York, Massachusetts, Maine and Georgia, the governments of Canada and the Province of Nova Scotia and the producers concerned in these localities. The production and distribution of deep sea scallops was the major problem. It was brought about by the fact that Florida regulations include them by definition in its shellfish certification requirements. It also was caused by the fact that this type of seafood is not included in the interstate certification system which is administered by the USPHS. In addition, 290 pounds of picked crabmeat and 5000 pounds of cooked and raw crabs and small quantities of uncertified oysters were condemned.

Shellfish and Crabmeat Production Certifications

County	Shellfish	Crabmeat
Bay	22	----
Brevard	----	2
Charlotte	----	2
Citrus	2	1
Dade	2	1
Dixie	----	1
Duval	4	2
Escambia	2	----
Franklin	29	6
Gulf	1	----
Hillsborough	----	1
Indian River	----	2
Lee	6	3
Levy	----	1
Manatee	----	1
Martin	----	1
Nassau	1	2
Pinellas	2	----
Sarasota	2	----
St. Lucie	----	1
Volusia	2	1
Wakulla	8	3
Walton	4	----
Totals	87	31

Final plans for the new Franklin County Health Center and Marine Laboratory were submitted by the architect. It is anticipated that the

USPHS will approve the design of these facilities and that invitations for construction bids will be released early in 1958. The first draft of a proposed revision of the Shellfish Chapter XIV of the State Sanitary Code was accomplished. This task was undertaken in order to bring Florida requirements in line with the improved recommended standards published recently by the USPHS. Because of a memorandum that was sent to all shellfish and crabmeat producers pertaining to the requirement of flush-type toilet facilities, five oyster houses in Franklin County, all scallop plants in Bay County and one crabmeat processor in Nassau County complied by installing them. The remaining producers in the state either have these sanitary facilities or must provide them before June 30, 1958, otherwise certification will not be renewed. Measures also were taken to prevent the malpractice of dipping oysters from one container to another in retail outlets.

Inter-official agency cooperation and assistance were continued with satisfying results with the State Department of Conservation, the Pure Food and Drug Administration and the USPHS. Representatives of the bureau participated in the Gulf Coast States Shellfish Conference in Biloxi, Mississippi and the Maryland Seafood Seminar. Throughout the year plant layouts and designs were reviewed, regular conferences held with producers and county sanitation personnel, suggested newspaper articles prepared, code interpretations given, and an earnest effort made to determine weaknesses in the program and correct them.

TABLE 43
SUMMARY OF ACTIVITIES SHELLFISH AND
CRUSTACEA PLANTS

Description	Operating Certificates Issued	State Visitations Made	New Plants Constructed	Plants Remodeled
Oyster Shucking and Packing	52	721	2	4
Oyster Shellstock Only	18	96	....	3
Scallop Shucking	24	102	....	2
Clam Shucking	2	....	....	....
Crabmeat Processing	31	394	....	5
Repacker	5	28	....	3

RELATED SHELLFISH AND CRUSTACEA ACTIVITIES

Oyster growing area waters samples bacteriologically tested.....	878
Oyster meat samples bacteriologically tested	155
Scallop meat samples bacteriologically tested	15
Crabmeat samples bacteriologically tested	656
Plant water samples bacteriologically tested	215
Swab tests	40

COMMERCIAL AND INSTITUTIONAL ESTABLISHMENTS

Commercial food service operations saw a total of 14,922 licensed establishments with a seating capacity of 801,555 as reported by the State Hotel and Restaurant Commission in August.

Among the major activities in which the section engaged was the revision of Chapter IX of the State Sanitary Code in order that it may be made consistent with the adjustments that had been executed for Chapter XI. This proposed edition has been primarily developed to govern the dispensing of sandwiches that have been prepared for take-out sales, although alterations were made in existing items also. During the year a series of conferences were held with the above agency in the preparation of "A Manual of Practice for Florida's Food and Drink Services", which was submitted for publication as a joint endeavor. This guide sets forth minimum requirements, gives public health reasons for them, and itemizes what is considered compliance with good food handling practices. Issues of the manual will be distributed in 1958 to all Florida licensed operators, county health department sanitation staffs and deputies of the Commission.

Plans and specifications for the construction and alteration of food service facilities were reviewed and approved. This work entailed detailed examinations of the designs and layouts of various types of projects. In recent years there has been an influx of inquiries concerning Florida's attitude toward mobile and itinerant food service operations. The number of communications in 1957 indicates that a future increase in the percentage of migratory dispensing units may be expected. A study also was made of problems related to the automatic merchandising of food. The complexity of these problems, however, led to the conclusion that a special Sanitary Code Chapter on food vending machines is considered advisable.

In the performance of its food service sanitation work this section met with architects and engineers, builders and owners. Its most productive work was the consultation service it rendered county health departments and the information it provided members of the food service industry and the public.

SCHOOL LUNCH DEPARTMENTS

In its work related to the review and approval of functional layouts and designs for school food service facilities, the section fostered the provision of not only essential elements, but also other features which would assure the best possible school lunch situations.

Engineering plans for school lunch departments, particularly those related to water supply and sewage disposal, were examined in approximately 10 per cent of the projects reported under the school sanitation title of this report. Encouragement was given county health departments to survey the sanitation status of school lunch departments

at regular intervals. Food sanitation lectures were presented to the school lunch staffs of Washington, Holmes and Walton Counties.

COMMON CARRIER CATERERS CERTIFICATION

Acting as an agent for the U. S. Public Health Service, this section made three quarterly surveys of catering points and commissaries serving interstate common carriers. A total of 25 establishments in the state that prepare and place food aboard airlines and railroad diners were certified to the USPHS on the basis of inspection reports and recommendations submitted to the central office by the health departments participating in this program.

Broward, Leon and Pinellas Counties were terminated as catering points due to the cessation of serving facilities. Miami, Jacksonville and Tampa remain the three strategic localities in the state where prepared foods are readily available to common carriers, although Pensacola and West Palm Beach also provide a more limited service. Of particular note is the attention being given to the safeguarding of drinking water and the sanitary condition and handling of water containers that are being placed on public conveyances.

FOOD-BORNE DISEASE INVESTIGATIONS AND FOOD CONDEMNATIONS

The section participated in the development of a kit of materials and suggested procedures for the investigation and reporting of food-borne diseases for county use, which was prepared jointly with the office of the State Epidemiologist and the Bureau of Laboratories and Local Health Service. It also assisted in food-borne disease investigations as requested. (Food condemnation activities are described in foregoing accounts under the shellfish and crustacea and food processing plant items.) More inquiries were received from counties for information on the identification of suspected foods and on the manner in which to proceed in doubtful and complex cases.

SUBDIVISION SANITATION (FRINGE AREA DEVELOPMENT)

The number of housing development cases reviewed and processed by the section reached its lowest point in 1957 since the subdivision sanitation program was launched by the bureau in 1952. This reduction is considered as the marking of a leveling off period.

Of the 17,006 lots processed, a total of 3809 lots, or 22 per cent, was determined as satisfactory for the utilization of septic tanks and conventional drainfields as an interim method for the disposal of sewage. Because of undesirable soil characteristics, or high water table elevations, 4857 lots, (29 per cent), were judged unsatisfactory for the installation of "rural type" septic tank systems.

In 49 per cent of the total lots processed (8247), opinions were rendered that improved sewage treatment facilities should be provided. There was a 42.5 per cent rise over 1956 in the number of cases that required these determinations.

In the cooperative program with the Federal Insuring Agencies, 3437 Federal Housing Administration and Veterans Affairs Final Inspection Forms were processed. A summary shows that 538 were FHA forms for individual sewage disposal systems and 2118 VA applications for similar installations. The majority of FHA cases concerned developments in Dade County, whereas VA documents were related to single unit dwellings in subdivisions that were planned in various counties. Twenty-five of the federal inspection reviews were reported out as unsatisfactory. In 438 instances rulings were issued that housing developments should be connected to central sewage treatment plants.

A total of 40 field trips were made to counties in order to assist in the solution of subdivision problems and to coordinate central office procedures, county health department activities, the responsibilities of government representatives and the interests of land developers. Although activity proceeded at a slower rate in 1957, closer scrutiny was given to prospective developments because of the growing scarcity of suitable land in Florida for septic tank installations.

TABLE 44
SUBDIVISIONS REVIEWED ACCORDING TO THE NUMBER
OF CASES PER COUNTY, THE NUMBER OF LOTS PER
CASE AND THE DISPOSITION OF CASES PER COUNTY
(1957)

COUNTY	Number of Subdivisions	New Subdivisions	Extension to Existing Subdivisions	Total Number of Lots	Number of Lots Processed Satisfactory	Number Lots Recommended Sewers	Number Lots Processed Unsatisfactory
Alachua	1	1	..	48	..	48	..
Bay	1	1	..	15	..	15	..
Brevard	12	6	6	2,594	189	2,405	..
Broward	6	5	1	656	656	..	..
Clay	2	2	..	47	40	..	7
Dade	12	6	6	1,391	807	..	584
Dixie	1	1	..	36	36	..	..
Duval	36	13	23	1,490	1,225	133	132
Escambia	8	8	..	301	156	..	145
Highlands	2	1	1	17	17	..	..
Hillsborough	30	12	18	407	84	134	189
Leon	3	..	3	79	27	..	52
Manatee	1	..	1	50	..	50	..
Marion	1	..	1	62	62	..	..
Martin	1	1	..	480	..	..	480
Nassau	1	1	..	8	..	..	8
Okaloosa	12	7	5	1,384	40	387	957
Orange	3	3	..	244	..	244	..
Palm Beach	11	3	8	2,874	166	1,737	971
Pinellas	18	11	7	1,448	5	430	1,043
Polk	6	5	1	2,633	156	2,400	77
Putnam	2	1	1	143	25	118	..
St. Johns	2	1	1	21	4	..	17
Seminole	1	1	..	165	..	..	165
Volusia	3	3	..	276	70	146	60
Walton	1	1	..	44	44	..	..
Totals	177	94	83	17,006	3,809	8,247	4,857

NOTE: Unlisted counties presented no subdivision projects for review.

COMMUNITY SANITATION RELATED TO SPECIFIC OPERATIONS

In view of the nature of Florida's current community health needs, the character of its prevailing growing and changing economy and the make-up of its tourist and resident populations, it has appeared appropriate from an administration and operating efficiency standpoint to group certain segments of the broad areas of assigned responsibilities under the above caption.

SCHOOL SANITATION

The principal function of the section in school sanitation is the review and approval of plans and specifications for school construction or alterations. A total of 107 projects were studied during the year covering complete new school units, classroom extensions and auxiliary additions such as gymnasiums, auditoriums, vocational agriculture buildings, rest

room accommodations and laboratory and science buildings. Work involved in this aspect of the section's activities was concentrated in the examination and evaluation of proposed sewage disposal and related sanitary facilities.

Approximately 25 per cent of the projects concerned proposed school projects for Dade County. Palm Beach, Brevard and Santa Rosa Counties were second and third in the number of school plans that were processed out as meeting sanitary engineering criteria.

A definite improvement was made in the type of sewage disposal methods that were arranged for contemplated school units. Emphasis was given to the provision of higher waste treatment and as a consequence more open and covered sand filter systems will be installed in schools under construction than primitive septic tank systems. School sewage disposal facilities should be provided for new school units and school additions in keeping with modern engineering and architectural trends. A state and national survey was initiated in order to obtain information on the current practices of the sanitary engineering field in school sanitation.

The section fostered programs for the sanitation supervision of the school environment. One of its present interests is the education of school custodians in appropriate sanitation procedures. Aid was given Walton, Holmes and Washington Counties in the presentation of this type of instruction. In a number of counties the health departments have organized cooperative services whereby schools are inspected routinely within their jurisdictions. Working relationships are maintained with local school boards in all counties of the state. In areas where regular sanitation services cannot be offered they are performed in accordance with the ability of health departments to do so in the fulfillment of their general environmental sanitation responsibilities.

School Plans Approved 1957

County	Number	County	Number
Alachua	1	Lafayette	1
Bay	1	Lee	5
Brevard	9	Levy	1
Dade	26	Manatee	2
Duval	3	Okaloosa	5
Escambia	5	Palm Beach	20
Flagler	2	Pasco	2
Gadsden	1	Pinellas	1
Gilchrist	1	St. Johns	1
Glades	3	Santa Rosa	9
Hillsborough	1	Sarasota	4
Indian River	1	Union	1
Jackson	1		
	Total 107		

TOURIST AND TRAILER PARKS

Since the revised tourist and trailer park permitting system was adopted January 1, 1956, a total of 1272 operation permits were issued. At the present time, permits once issued are not reissued on an annual basis. The only exceptions made in this procedure are where there are changes in ownership or in name.

The high number of permits issued in 1956 was due to requested county surveys of existing parks which were conducted for the purpose of obtaining complete coverage of these facilities and to determine alterations and extensions that had been made without knowledge of health authorities. By comparison in 1957, a total of 588 permits were awarded which indicated approximately 14 per cent decrease under the previous year. This status has been brought about by desirable conditions effected by the new permitting procedures, less turnover, and the alert attention that is being given trailer parks by county health departments. The more than two-fold increase in trailer spaces that have been made available for independent trailers implies a great deal of progress in that sewage disposal and water supply systems had to be designed to meet their needs through proper service connections to approved works. Plans and specifications for 114 projects of this type were deemed acceptable. They involved approximately 150 individual reviews for conventional septic tanks and drainfield systems and open and closed sand filter treatment methods. Approval of connections to existing municipal sewage treatment plants was given for six of the trailer park projects examined.

In November an issue of HEALTH NOTES, entitled "Trailer Parks," was prepared and published in cooperation with the Division of Health Information. This brochure made available to the industry and the public historical and current public health data pertaining to the solution of prevalent tourist and trailer park problems. It outlined methods for establishing trailer parks and presented suggested layouts to guide interested persons in their compliance with sanitation standards. This information piece was preceded by a bureau memorandum, addressed to county health officers and sanitation personnel in which a directive was set forth that any trailer park having 20 or more spaces, or acreage available for expansion, should consider the provision of centralized systems for both water supply and sewage disposal.

TABLE 45

NUMBER OF SPACE ACCOMMODATIONS PROVIDED IN PERMITTED TOURIST AND TRAILER PARKS BY COUNTIES (1957)

County	Permitted Establishments	Trailer Spaces		Totals
		Independent	Dependent	
ALACHUA	18	516	43	559
BAY	12	217	74	291
BREVARD	26	899	410	1,309
BROWARD	44	1,751	3	1,754
CALHOUN	1	3	255	258
CHARLOTTE	7	485	6	491
CLAY	6	101	8	109
COLLIER	4	83	29	112
DADE	35	2,752	16	2,768
DECATUR	20	421	3	424
DECATUR	1	16	3	19
DECATUR	1	3	327	330
GULF	38	1,084	14	1,098
HILLSBOROUGH	6	219	178	397
LAKE	26	618	5	623
LEE	12	316	571	887
LEON	51	2,824	356	3,180
MANATEE	8	356	33	389
MARTIN	4	33	5	38
MONROE	3	30	88	121
NASSAU	5	88	1	89
OKALOOSA	1	45	1	46
OKEECHOBEE	26	586	13	599
ORANGE	2	56	79	135
OSCEOLA	8	266	845	1,111
PALM BEACH	20	929	62	991
PASCO	82	2,757	18	2,775
PINELLAS	46	1,378	198	1,576
POLK	2	18	18	36
ST. LUCIE	47	2,962	8	2,970
SARASOTA	1	18	14	32
SEMINOLE	3	14	28	42
SUMTER	22	668	25,671	26,339
VOLUSIA	22	668	25,671	26,339
TOTALS	588	22,512	3,159	25,671

CAMP SANITATION

Continued progress is being made in the promotion of a healthy environment for recreational, educational and migratory labor camps. The 111 permits issued shows an 11 per cent increase in 1957.

General sanitation in migratory labor camps remains a major problem in various areas of the state. Although improvements have been made in the current year in regard to better housing conditions and the provision of sanitary facilities, constant attention is required in order to assure appropriate operation and supervision of these types of camps. There also continues to be a need for the development of comprehensive sanitation programs in those counties in which migratory labor camps are situated. The assignment of a sanitarian in mid-year to the migratory labor camp program that is headquartered in Palm Beach County will aid in the accomplishment of sanitation objectives for that area.

TABLE 46
CAMP PERMITS ISSUED 1957

County	No. Permits Issued	Type of Camp	
		Labor	Recreational
Brevard	8	5	3
Dade	80	80	4
Hernando	1	1	1
Highlands	1	1	1
Indian River	1	---	1
Lake	4	4	---
Manatee	4	3	1
Pasco	5	5	---
Pinellas	2	2	---
Polk	1	---	1
St. Lucie	1	1	---
Suwannee	1	---	1
Volusia	2	1	2
Totals	111	102	9

BEDDING ACT ADMINISTRATION

An increase of \$4,546.51 was realized in the administration of the Florida Bedding Inspection Act over that which was reported in 1956. This increase is noteworthy since it was decided this year to discontinue the registration of "Renovators" in those cases where firms were also manufacturing bedding. Although there was a decrease of registrations in the renovator and manufacturer classifications there was an increase in the number of retail establishments registered.

REGISTRATIONS:

705 Manufacturers Certificates @ \$25.00	\$17,625.00
281 Renovator Certificates @ \$10.00	2,810.00
2775 Retailers Certificates @ \$5.00	13,875.00
Registration Total	\$34,310.00

STAMP DISTRIBUTION:

3862 Books 1¢ Stamps @ \$ 5.00	\$19,310.00
3036 Books 2¢ Stamps @ 10.00	30,360.00

Stamp Total	\$49,670.00
Total	83,980.00
REFUNDS, CANCELLATIONS, STAMP RETURNS	183.49
Years Total	\$83,791.51

Regular field personnel conferences were conducted to coordinate and achieve uniformity in the enforcement aspects of the program. Administration procedures were perfected after the requirements of other states were studied at the Chicago Conference of the National Association of Bedding Law Officials. In view of various types of bedding materials that have been developed for marketing, instruction of the staff was continued in the composition and nomenclature of specific types of filling materials.

A full-time laboratory technician was assigned to the program early in the year. As a consequence, the use of the laboratory in the detection of violations was emphasized. This scientific approach resulted in a marked improvement in the quality of filling materials utilized by the Florida industry. Of the 316 samples submitted for analysis, 131 results showed non-conformance with filling material criteria. In 78 of the cases violations were corrected and in 53 instances the filling material was banned. Inspectional activities revealed 607 registration and labeling violations. Corrections were brought about in 416 cases, and in the remaining 191 articles of bedding were banned from sale.

The section presented for the second year a display at the third Annual Furniture Mart Show sponsored by the Florida Association of Furniture Manufacturers. This organization, in cooperation with the State Board of Health, will sponsor the presentation of several proposed changes in the Florida Bedding Law to the next session of the Legislature.

MISCELLANEOUS ACTIVITIES:**APPROVAL OF MISCELLANEOUS PROJECTS**

There was a rise in the number of miscellaneous projects that were submitted for review and approval of plans and specifications. In 1956 there were 56 designs of this type approved, whereas 200 were processed in 1957. These engineering and architectural proposals included motels, food service facilities, service stations, office buildings, hotels, apartment houses and a variety of other structures. The features that concerned the bureau related to water supply and treatment, sewage disposal, toilet facilities and the sanitary arrangement of layouts and equipment. Additional work was involved in the review of some 20 designs for private resident disposal systems, which were found to be acceptable. No formal approval was given these projects due to the lack of operational jurisdiction over them.

SANITARY NUISANCES

The rate of complaints received on alleged unsanitary conditions existing in different types of establishments in certain counties in the state remained at a level comparable to 1956. The usual procedure of referring such matters to county health departments with a request for investigation was followed. The work involved in the investigation of

sanitary nuisances has been often said to absorb a major portion of time of county health department personnel. A survey of the state is planned for 1958 with the purpose of developing recommended procedures for screening and handling situations of this nature.

RENDERING PLANTS

The State Board of Health in 1957 assumed the responsibility for the supervision of general sanitation and waste disposal of rendering plants. Although the industry provides a community service in the manufacture of basic materials for cleaning products, its processes have in the past resulted in the creation of sanitary nuisances and industrial waste problems. Such items as soaps, cosmetics, shaving creams, shampoos and other household articles require a non-vegetable oil component, which is extracted from the inedible portions of animals and fowl. The procedure for obtaining this material calls for the application of sanitary control measures. The cooperative efforts of members of the industry have minimized to a great degree the undesirable conditions that have existed. The Southeastern Renderers Association, an affiliate of the National Renderers Association, is currently conducting research on the actual rendering process and satisfactory methods for the disposal of plant wastes.

In order to determine the scope of the rendering plant problem, surveys of existing establishments in the state were undertaken with the assistance of county health departments. A direct result of these studies was the inclusion of these plants in the bureau's permit system. A proposed new Chapter of the State Sanitary Code and an inspection report form were prepared. Conferences were held with individual processors throughout the year and a regional meeting of plant operators in Atlanta was attended. To date, there are seven rendering plants operating under permit in Dade, Clay, Hillsborough, Jackson, Palm Beach and Seminole Counties.

NURSING HOME AND HOSPITAL PROGRAM PARTICIPATION

Cooperative assistance was provided the Bureau of Special Health Services in the review of plans and specifications for nursing homes and hospitals. Sixteen nursing homes and five hospital projects were approved. They included sanitary engineering features related to the construction of new units and additions to existing buildings and involved the evaluation of proposed layouts and designs for water supply and sewage disposal, patient accommodations and food service facilities.

FLORIDA'S SANITATION NEWS LETTER

The section has the responsibility of preparing Florida's Sanitation News Letter for the bureau. This publication attempts to provide sanitation personnel in the state with pertinent information to assist them in their public health duties.

DRAFTING

GENERAL DRAFTING

The routine duties of the section involving drafting, processing of plans, maintenance of records and Ozalid reproduction work were increased in some phases over the previous year. This is reflected in the increased volume of the records and files.

Map and chart work to illustrate various surveys and reports pertaining to industrial waste and stream sanitation problems was of considerable proportions in 1957.

Other drafting consisted chiefly of charts, visual aids, lecture guides and typical drawings to be used for general distribution purposes.

RECORDS AND FILES

The standard procedure of microfilming all file copies of all plans submitted for review by the bureau was followed. A total of 7103 film images were processed, filed and indexed.

During the year 1684 separate projects were processed in the drafting room. This is an increase of 29 per cent over 1956. The above figure does not accurately reflect the total of all projects approved by the bureau, since "Projects processed" will include a number of projects submitted and filed as information and others submitted which were approved at county level.

Articles by staff members:

- Jackson, E. R., *Ensenanza De Los Procedimientos De Manipulacion Higienica De Los Alimentos* (Education in Hygienic Foodhandling Procedures), *Bol. Ofic. San. Panam.* 42:589-596, June 1957.
- Miller, J.B., *Municipal and domestic water use*. *Proc. Soil and Crop Science Soc. of Fla.* 16:85-92, 1956.
- Miller, J.B., *A decade of water supply development in Florida*. *J. Fla. Engineering Soc.* 9:23 passim, Dec. 1957.

BUREAU OF MENTAL HEALTH

MELVIN P. REID, Ph.D.
Acting Director

This bureau is concerned with the prevention of mental illness, the building of healthy social forces and the nature of human relationships. It attempts to be effective in these areas through efforts with community, state, regional and federal programs designed to maintain and strengthen the emotional and mental well-being of all our citizens. It hopes to strengthen and coordinate varied services and programs so there will be a minimum of duplication and a maximum of preventive mental health services.

When fully staffed the bureau offers consultants in psychiatry, psychiatric nursing, mental health nursing, psychiatric social work and clinical psychology. At the year's end, however, the positions for a psychiatric director and an additional psychiatric social worker were vacant.

In keeping with the progress in institutional care for psychiatric disorders in Florida, the State Board of Health has broadened and intensified its interest in community and preventive mental hygiene programs through the Bureau of Mental Health, other related bureaus at the State Board of Health and its local affiliates. Enthusiasm for information concerning many aspects of mental ill health, mental illness and mental health by groups of all types and individuals has characterized this past year. While only a few professional groups were intimately concerned with mental health a few years ago, now most civic, fraternal, professional, social and educational groups are anxious to learn what they can about mental health, how it may be integrated into their respective programs and how techniques and skills in human relations may improve their personal efficiency and effectiveness in dealing with others. Requests for consultation in some phase of mental health programming have been received from groups ranging from interested executives in industry to the Interim Legislative Committee on Mental Health; about problems ranging from early child rearing practices to blood chemistry and endocrinological studies in the etiology of schizophrenia in institutionalized patients.

Members of the staff of the bureau have participated in local, state, regional and national programs involving activities and interest in parent-child relationships, adjustment of the aged, alcoholism, diagnosis and treatment of childhood emotional disorders, research and training in mental health, human relations in industry, the development of adult out-patient psychiatric services for indigents, follow-up studies for patients on trial visit from the state hospital, pre-admission and concurrent assistance for state hospital patients and their families, services and programs for the retarded and brain injured, exceptional child programs in the public schools, the origin of delinquent behavior and preventive or

control institutes, institutionalization of psychotic children, and both formal and in-service training for mental health specialists and lay groups.

MENTAL HEALTH AND CHILD GUIDANCE CLINICS

Although no new clinics were developed during the year, at the year's end the development of one and possibly two more was being given careful consideration in areas where population and need warranted. The difficulties in recruiting competent professional personnel with inadequate salary schedules, and the limitation in local funds and preparedness, were chief among the deterrents for clinic organization.

Professional assistance, consultation and financial support to mental health centers and clinics continues to be a vital part of the bureau's program. During the year the 14 child guidance and community mental health clinics continued their efforts to meet their respective community needs for mental health services despite ever-increasing waiting lists for service and growing demands for mental health leadership in their communities. Several of the clinics improved their housing accommodations through new construction or renovation; however, inadequate housing for expanding programs continues to be a real concern.

Gains were made in a few of the clinics in the ratio of local community financial support to state funds; however, the percentage of state funds throughout the clinic system continues to increase slightly year by year.

The administrative organization of these 14 clinics varied from mental health divisions in county health departments or a psychological clinic of the coordinated university clinical services program, to operation by an independent board of directors representing professional and lay groups in the county. As in past years, funds for their operation were received, regardless of the organizational pattern, from U. S. Public Health Service grants and appropriations from the state legislature, both administered through the State Board of Health. Other significant sources of support were special education units from the State Department of Education and local boards of public instruction, civic and social clubs, city councils, community chests, county commissioners and fees for patient services.

The bureau was active in 1957 in offering a team of consultants to the clinics on matters ranging from statistical reporting procedures to assistance in the formulation of basic clinic policies. The development of in-service training programs and workshops for professional staff members of the clinics continued to be an important activity.

While the clinics were initially developed to provide diagnosis, treatment and general service to patients, many clinics last year spent as much as 20 per cent of their total professional man-hours in community educational services, in-service training of allied professional groups and the dissemination of accurate and current information on

general mental health principles, human relationships in family living, child rearing practice and other subject areas of concern to the community. Several of the clinics are recognizing that in some cases more may be accomplished by working on a consultation basis with nurses, teachers, police officers, welfare workers and others who work directly with people than by they themselves undertaking an overwhelming case-load of referrals from these agencies. Continuing consultation to other community services represents a significant contribution that clinic staff members play in the total community mental health preventive program. The bureau is active in assisting professional staffs and the boards of directors of the clinics in evaluating carefully the philosophy and function of the clinic in its environment and in sharpening the edge of the clinics' approach to the community's expectations for mental health services.

TABLE 47

SOURCE OF TOTAL BUDGET FOR FLORIDA'S CHILD GUIDANCE AND MENTAL HEALTH CLINICS AND AVERAGE CONTRIBUTED FOR THOSE CLINICS WHICH RECEIVE FUNDS FROM EACH SOURCE.

FOR PERIOD JULY 1, 1956 — JUNE 30, 1957

Source of Funds	Amount (in dollars)	Percentage	Average Amount Contributed
State Government ...	\$273,974	50.0	\$19,570
County Government ...	132,619	24.2	10,201
City Government ...	15,675	2.9	5,225
Community Chest ...	65,991	12.1	9,427
Patient Fees ...	20,884	3.8	2,320
Other Sources ...	38,291	7.0	3,481
Total Budget	\$547,434	100.0	\$39,102

The 14 clinics in operation during 1957 were as follows:

Florida Center of Clinical Services, University of Florida, Gainesville
 Bay County Child Guidance Clinic, Panama City
 Broward Mental Hygiene Clinic, Inc., Ft. Lauderdale
 Dade County Child Guidance Clinic, Miami
 Duval County Child Guidance & Speech Correction Clinic, Jacksonville
 Escambia County Child Guidance Clinic, Pensacola
 Hillsborough County Guidance Clinic, Tampa
 Mental Health Clinic, Leon County Health Department, Tallahassee
 Manatee-Sarasota Guidance Center, Bradenton-Sarasota
 Orange County Guidance Clinic, Orlando
 Palm Beach County Guidance Center, West Palm Beach

Pinellas County Child Guidance Clinic, St. Petersburg
 Polk County Guidance Center, Bartow
 Volusia County Health Department, Daytona Beach

During 1957, 4938 patients received diagnosis, treatment or another type of service from above clinics.

Consistent with the notion that these clinics are essentially preventive, 28 per cent of those patients discharged last year were nine years of age or younger and 49 per cent were 13 years and younger. Further, the two largest diagnostic categories were Transient Personality Disorders (Adjust Reactions) and other Personality Disorders, each representing 14 per cent respectively, of the total patients. Only two per cent were diagnosed as psychotic during the entire year. Nearly twice as many male patients were discharged as female, an expected relationship based on previous years reporting. Only 254 patients, or slightly over five per cent, were non-white.

During the year bureau funds were added on a limited basis to out-patient adult psychiatric clinics (part-time) in Jacksonville and Pensacola. Additional requests for services of this nature were pending in several other areas of the state at the year's end. This is an important part of the plan to offer resources to county health departments in the hospital follow-up program.

Although statistical reports on all patients discharged from all 23 out-patient psychiatric clinics in the state are forwarded to the bureau for processing, then to be sent to the National Institute of Mental Health, a full calendar year's statistical report was not available for the services reserved exclusively for adults.

At the end of the year the professional staff of the 14 clinics was composed of two full-time psychiatrists, 12 part-time psychiatric consultants, 38 clinical psychologists, 30 psychiatric social workers, two speech therapists and one hearing teacher. Two of the clinics had budgeted but unfilled positions for full-time psychiatrist directors, one for a half-time medical director, six vacancies existed in clinical psychology and three in psychiatric social work.

MENTAL HEALTH WORKER PROGRAM

Drawn from the fields of social work, psychology, nursing and related professions, mental health workers are members of the public health team in county health departments. Here they assist in carrying on a mental health program in such areas as coordination of mental health services, community organization for mental health, counseling, consultation to other agencies, mental health education, clinic referrals and follow-up services to patients from the state hospitals.

By the end of 1957, 17 mental health workers carried on these activities in county health units serving 24 counties. They receive consultation from the nearest child guidance or mental health clinic as well

as from this bureau. A planned program of orientation and in-service education is provided to supplement their training and assist them with this new type of work.

Started in 1954, this program began as a demonstration project to find an effective way to further implement mental health services throughout Florida. In 1955, it was expanded for further study and three mental health workers covered five counties. By the end of 1956, five workers served 10 counties. Additional legislative appropriations made it possible to expand the program to its present size and plans are underway for these services to be extended to additional counties.

EDUCATIONAL ACTIVITIES

The bureau has sponsored, co-sponsored and participated in, a variety of educational and training programs involving both state and local professional and community groups.

In-service training programs sponsored by the bureau for members of the mental health disciplines and health department personnel have included a workshop on *Projective Techniques* for clinical psychologists, on *Supervision* for psychiatric social workers, on *Community Organization* for mental health workers, on *Psychiatric/Mental Health Nursing* for public health nursing consultants and supervisors. The bureau co-sponsored with the Division of Public Health Nursing the second in a series of *Leadership* conferences for public health nursing personnel.

Members of the bureau staff have served on state and local planning committees, as advisors, and as participants in conferences, workshops, and institutes concerned with community mental health and services to patients involving professional and lay groups and agencies.

The bureau has been active with USPHS consultants in a number of projects which have local, state and national significance. An example of this is the Volusia County School Mental Health Project where the Volusia County Health Department, the County and State Department of Education, and a research team from the National Institute of Mental Health are all participating.

An increase in the budget for educational programs also made it possible to provide study grants to three public health nurses for preparation in the field of mental health. Two public health nurses attended the one-quarter program in Mental Health Nursing at University of Minnesota and one staff public health nurse is on educational leave earning her Master's degree in public health nursing supervision with a minor in mental health.

CONSULTATION SERVICES

Consultation activities increased during 1957. Two major factors determined the increase. One was the more definitive description of program, and the other, the 300 per cent increase in state appropriations.

Directors of local health units sought ways of meeting needs through (1) interpretation of program activities within local units and to responsible local groups (i.e. medical societies), (2) selection and placement of personnel, (3) coordination of services of increased multi-discipline staff groups, and (4) sharpening of skills of work groups through formal and agency training. Ways of increasing clinical services were explored, with metropolitan counties organizing committees to spearhead development of adult mental health clinics.

Community health associations and councils sought aid in differentiation of their role from that of the service units (health and hospital) in community and state.

Continuing programs of professional training in psychiatry, psychology, and social work received attention, both for curricula and internships. One university specialty program in psychiatric nursing leading to the Master's degree admitted the first students during this calendar year. Assistance has been given in (a) obtaining funds for and (b) selecting faculty, (c) recruitment of student and (d) placement of graduates in state and county tax supported services.

All members of the staff have been active in various other consultative capacities to the staff of the Bureau of Local Health Services as well as to local health officers. For example, in addition to the consultation to clinical specialists, mental health workers and others, the nursing service staff in 19 county health departments have received regular and continuing consultation services on patient care, 44 staff workers received intensive advisory service while 153 staff workers were served through seminars and workshops. Also, staff members have been active in a consultative capacity to the Bureaus of Finance and Accounts and Special Health Services.

COUNCIL ON TRAINING AND RESEARCH IN MENTAL HEALTH

The Council on Training and Research created by the Legislature in 1955 to advise the State Board of Health in a program of training and research in mental health received a biennial appropriation of \$363,400. This represents an increase of \$113,000 and makes possible a modest expansion of research and training activities. (See report of the Council immediately following this report).

Miss Annie Laurie Crawford, R.N., M.Ed., assumed the duties of the Psychiatric Nursing Consultant (nurse specialist for in-service training) with assignment to the Bureau of Mental Health. Doctor Melvin P. Reid, Acting Director of the Bureau, has served as liaison officer between the Council and the State Board of Health in the temporary absence of a Psychiatrist Director of the Bureau of Mental Health.

FOLLOW-UP OF PATIENTS ON TRIAL VISIT FROM FLORIDA'S STATE HOSPITALS

A two-year period has elapsed since the State Board of Health and the State Hospital held joint meetings in which health officers and clinical directors agreed to the plan of follow-up. For approximately 21 months at this reporting, selected referrals limited to white male and female patients, have been made by the State Hospital to local health officers. These referrals began in April 1956. At the end of 1957, 61 county health units' medical health officers indicated by their monthly activity reports that they were carrying on some form of mental health activity as compared to only 58 at the end of 1956. In 1957, 4219 persons were admitted to mental health services. Letters from the State Hospital and from health officers indicated that referrals were received on 383 furloughed patients. The policy of referring selected male and female white patients was continued. Of the 383 persons referred, 276 (72 per cent) of these were admitted to nursing service.

During the year six county health departments elected to use experimental forms and procedures. Other health units adopted or modified their own procedures. The health units have collaborated with general and special medical practitioners, with existing mental health clinics, and with welfare, vocational rehabilitation, county court, and state employment services in aiding patients and their families in meeting their health, medical and other needs.

In all of the above the autonomy of local health units has been respected. Units have had freedom to create design for program activity. This has been reflected by the following:

One area organized a professional steering committee. The steering committee recommends follow-up services on the basis of patients' needs, the availability of agencies already active in patient and family health and welfare plans, and local policy for use of resources. In another area, a local professional committee on mental health advises the public health nursing staff in their services in much the same way. Other units have informal groups in which bureau staff members have participated throughout the year. Some county health units have procedures whereby the county court provides the health unit with referral information as soon as families in trouble come to them. The units then offer their health services at this point.

Future needs as identified by local health officers are for:

Regional seminars on mental health for physicians and public health staff (Use of tranquilizers, et cetera.); advance notice of discharge; notification of admission; more specific information on persons returning from hospital; community mental health clinics; more medical supervision; preparation of home and community for return of patients; and more effective coordination of services.

Impressions from this experience are multitudinous and gratifying. Health Officer's reports indicate interest and willingness on part of public health personnel to shoulder this additional responsibility. The Florida State Hospital, on the other side, has found it useful to the hospital and to patients and their families to have this resource available in the community. Public health workers are looking at their experiences from the standpoint of earlier casefinding, earlier services, as well as taking a new look at the possibility of preventive program activities. The new South Florida Hospital began its referral procedures in June 1957.

Opportunities to share information and experiences were provided through 48-hour orientation programs and planning conferences held at the State Hospital and the State Board of Health during the year. Agreements made in December 1957 indicate that *all new admissions* will be reported to local health officers of *all* patients beginning early in 1958.

TABLE 48

DISCHARGED PATIENTS BY CLINICS, TYPE OF SERVICE, CONDITION ON TERMINATION,
REFERRAL SOURCE, AND NUMBER OF NEW CASES
FLORIDA CHILD GUIDANCE CLINICS
JANUARY 1, 1957 — DECEMBER 31, 1957

CLINIC	Total Patients	TYPE OF SERVICE				CONDITION ON TERMINATION			REFERRAL SOURCE						Number of New Cases
		Diagnosis and Treatment	Diagnostic Study Only	Psychological Testing Only	Other Services Only	Improved After Treatment	Unimproved After Treatment	Not Treated	Self	School	Court	Agency	Physician	Other	
FLORIDA TOTAL	4,938	872	2,108	939	1,019	672	200	4,066	1,380	1,400	376	675	545	562	4,203
ALACHUA	913	63	484	144	222	45	18	850	371	276	...	49	21	245	740
BAY	207	95	56	13	43	93	2	112	43	69	8	19	25	13	179
BROWARD	182	57	68	23	34	42	15	125	70	22	16	15	46	9	165
DADE	312	73	47	109	83	60	13	239	189	61	5	140	28	14	275
DAVAL	500	79	173	100	148	58	21	421	96	88	9	34	55	112	424
ESCAMBIA	256	76	143	21	16	58	18	180	97	41	29	60	47	8	237
HILLSBOROUGH	361	71	149	69	72	41	30	280	83	76	117	71	33	5	308
LEON	316	135	68	86	27	107	28	181	52	101	12	28	59	47	246
MANATEE-SARASOTA	184	32	44	73	35	25	7	152	79	61	11	29	43	18	173
ORANGE	309	52	152	39	66	45	13	257	32	117	22	29	40	5	270
PALM BEACH	193	48	103	15	27	35	13	145	158	68	19	29	40	5	183
PINELLAS (Combined St. Pete, Clearwater)	529	63	312	80	74	43	20	466	158	102	82	115	58	14	444
POLK	274	23	124	76	51	17	6	251	91	28	46	49	51	9	234
POLUSIA	402	5	185	91	121	3	2	397	12	290	...	37	19	44	324

TABLE 49

DISCHARGED PATIENTS BY AGE, RACE, SEX, DIAGNOSIS, AND NUMBER TREATED
FLORIDA CHILD GUIDANCE CLINICS
JANUARY 1, 1957 — DECEMBER 31, 1957

DIAGNOSIS	Total Patients	AGE IN YEARS									RACE AND SEX					Number Treated
		0-4	5-9	10-13	14-17	18-20	21-29	30-44	45-64	65 & over	Male	Fem.	White Male	White Fem.	Non-white Male		Non-white Fem.
FLORIDA TOTAL	4,938	440	1,368	1,081	743	466	469	281	80	10	3,079	1,605	154	100	872	
BRAIN SYNDROMES (Acute, Chronic) Associated with convulsive disorder (idiopathic epilepsy)	48	4	18	17	7	1	1	...	...	...	27	13	8	...	16
Associated with cerebral arteriosclerosis or senile brain disease	4	1	1	26	17	1	3	...	1	1	4	...	11	...	13	
All other brain syndromes	162	35	78	...	...	...	...	...	2	...	100	43	...	8	...
MENTAL DEFICIENCY (Familial or Hereditary)	69	2	26	29	10	1	...	1	...	...	40	14	13	2	...
Mild	46	2	22	16	3	2	...	...	1	...	18	20	3	5	...
Moderate	23	2	11	3	4	...	...	2	...	...	8	8	6	1	...
Severe	5	2	3	...	...	...	...	...	...	...	1	3	...	1	...
Severity not specified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
MENTAL DEFICIENCY (Idiopathic)	133	11	47	36	31	3	3	2	...	...	72	45	14	2	8
Mild	144	8	57	39	30	2	6	2	...	...	67	54	15	8	4
Moderate	61	10	25	13	12	...	1	...	...	...	27	20	7	7	...
Severe	6	4	...	2	...	...	...	...	...	...	4	2	...	...	...
Severity not specified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
PSYCHOTIC DISORDERS	2	...	...	...	...	...	...	...	...	2	1	1	...	...	...
Involuntary psychotic reaction	7	...	...	...	...	...	...	...	...	...	3	4	...	...	...
Affective reactions	94	1	13	22	26	10	7	11	3	1	65	22	5	2	19	
Schizophrenic reactions	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Paranoid reactions	7	...	...	4	...	...	...	2	1	...	5	...	...	2	...
Other psychotic reactions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
PSYCHOPHYSIOLOGIC AUTONOMIC AND VISCERAL DISORDERS (Psychosomatic disorders, & organ neuroses)	19	1	4	8	2	...	1	2	1	...	12	6	...	1	10	

TABLE 49 (Continued)
DISCHARGED PATIENTS BY AGE, RACE, SEX, DIAGNOSIS, AND NUMBER TREATED
FLORIDA CHILD GUIDANCE CLINICS
JANUARY 1, 1957 — DECEMBER 31, 1957

DIAGNOSIS	Total Patients	AGE IN YEARS								RACE AND SEX				Number Treated	
										White		Non-white			
		0-4	5-9	10-13	14-17	18-20	21-29	30-44	45-64	65 & over	Male	Female	Male		Female
PSYCHONEUROTIC DISORDERS	119	1	40	34	15	6	10	13	...	...	64	51	2	2	75
Anxiety reaction	115	...	...	33	3	1	4	5	...	...	4	11	...	...	9
Dissociative reaction	26	...	1	4	7	...	2	...	...	...	9	17	...	...	15
Conversion reaction	10	...	1	3	2	...	4	2	...	...	6	4	...	...	5
Phobic reaction	29	1	5	3	5	2	4	8	...	...	16	13	...	...	16
Obsessive compulsive reaction	18	...	2	1	1	...	1	1	...	...	5	13	...	...	9
Depressive reaction	13	...	4	...	4	2	2	1	...	...	11	2	...	...	10
Psychoneurotic reaction, other	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
PERSONALITY DISORDERS	143	1	19	43	27	13	17	19	4	...	89	49	2	3	69
Personality pattern disturbance	396	6	87	115	71	10	40	54	13	...	246	143	6	1	214
Personality trait disturbance	73	...	7	17	35	2	8	3	1	...	42	27	1	3	24
Sociopathic personality disturbance	77	9	36	25	6	...	1	...	...	...	62	13	1	1	20
Special symptom reaction	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TRANSIENT SITUATIONAL PERSONALITY DISORDERS	5	...	1	1	1	...	1	1	...	...	3	2	...	...	2
Gross stress reaction	37	...	...	...	...	...	12	20	...	...	8	29	...	...	30
Adult situational reaction	458	38	273	144	120	7	5	...	...	...	293	145	17	3	210
Adjustment reaction of childhood	196	...	1	63	120	...	...	...	...	...	115	76	1	4	85
Adjustment reaction of adolescence	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Adjustment reaction of late life	11	...	4	4	2	...	...	...	...	...	8	2	...	...	2
Other	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NO PSYCHIATRIC DISORDER FOUND	522	38	64	31	64	203	102	19	1	...	401	116	4	1	...
NO DIAGNOSIS MADE	1,957	263	518	372	235	199	233	99	34	4	1,242	635	37	43	...

FLORIDA COUNCIL ON TRAINING AND RESEARCH IN MENTAL HEALTH

Robert W. Kleemeier, Ph.D., Chairman, Jan. 1 — July 1, 1957
John T. Benbow, M.D., Chairman, July 1, — December 31, 1957
Mrs. E. C. Rogers, Vice Chairman
Mrs. Sonia L. King, R.N., Secretary
Sullivan G. Bedell, M.D. (resigned July 1957)
William S. Frates
Loyal Frisbie
Mrs. E. W. Gautier
Victor B. Johnson, Ed.D.
Canon Robert J. McCloskey
Coyle E. Moore, Ph.D.

In April 1957 the Council voted to operate its major research efforts on an "intramural plan" with the State Board of Health, utilizing the latter's research staff.

The following research projects were underwritten for the fiscal year 1957-58:

Evaluation of the Improvement in Health exhibited by a group of patients treated by a "Total Push Program" (Geriatric Clinic University of Miami Medical School)...\$ 5,000
A Study of the Occurrence, Distribution and Treatment of Mental Ill Health in a Florida County (Gadsden)..... 11,600
A Baseline Study of the Characteristics of Patients in a Florida Mental Hospital (Chattahoochee) 4,550
Statistical Study at South Florida Mental Hospital, Hollywood 2,000
South Florida State Hospital to explore preliminary stages of setting up research on chemical composition of the blood in mental illness 500
The adjustment of the furloughed mental hospital patient to his home and community 5,500

On April 13-14 the Council sponsored a conference of professional people representing as fully as possible the groups and agencies interested in mental health research with the purpose of bringing to light what is being done, possibilities of further collaboration and pointing up needs in mental health research. The Coordinator of Research of the State Board of Health was requested to assist in the planning of the conference.

The conference was attended by 38 scientists. There were nine out-of-state consultants. Assistance was provided by the U.S. Public Health Service, the Southern Regional Education Board, and the Mil-

bank Memorial Fund. The consultants included Dr. William Malamud, Boston University Medical School; Dr. Paul Lemkau, Johns Hopkins School of Public Health; Dr. Ernest Gruenberg, Milbank Memorial Fund; Dr. William Hurder, Southern Regional Education Board; and five senior staff members concerned with mental health from the U. S. Public Health Service. Following are some points of discussion taken up at the Conference: Considerations in awarding research grants; standards for the evaluation of mental health programs; epidemiology and biometry in studies of mental health; research in mental health in community public health programs with particular attention to needs of children; research in mental health in institutions.

TRAINING CENTERS IN PSYCHOLOGY

The supervisory unit in clinical psychology located at the Dade County Child Guidance Clinic was transferred to the Center of Clinical Services, University of Florida, with the appointment of Audrey S. Schumacher, Ph.D. as clinical supervisor. The supervisory unit, formerly located at the Escambia County Child Guidance Clinic, was placed in the Leon County Child Guidance Center with the appointment of Charles Taffel, Ph.D. as training supervisor in August. The third supervisory unit remains at the Duval County Child Guidance Clinic with Haim G. Ginott, Ed.D. as supervisor; however, it was agreed that this unit may be assigned at a later date to the Miami area when a training center is developed in that area for doctoral candidates.

SCHOLARSHIPS

Scholarships and stipends have been granted to a number of candidates in the fields of clinical psychology, general psychiatry, psychiatric social work and psychiatric nursing. (The names of the recipients may be found elsewhere in this volume under "General Administration.")

Since the inception of the training program under the Council, eight students have completed their work in psychiatric social work, and three nurses have completed work in psychiatric nursing; all are now employed in Florida. Three doctors have completed their training in psychiatry and are practicing in Florida.

Five nurses attended a workshop during the summer at Catholic University on "Teaching and Implementation of Psychiatric-Mental Health nursing."

During 1957 the Council held five meetings. The purpose of the Council (whose members are appointed by the Governor for four-year terms) is to advise and consult with the State Board of Health in carrying out a program of training and research in mental health and providing scholarships.

Paul W. Penningroth, Ph.D. resigned as of January 1, 1957 and Victor B. Johnson, Ed.D. was appointed to fill his unexpired term. Robert W. Kleemeier, Ph.D. resigned in June to accept a Fellowship in England.

BUREAU OF NARCOTICS

FRANK S. CASTOR, Ph.G.
Director

As in previous years, the activities of this bureau showed an increase in all phases during 1957. Another inspector was added to the staff and a number of additional responsibilities were made a part of the work of the bureau.

It is gratifying to report that Florida, in spite of a burgeoning population and substantial growth in tourist business both summer and winter, has not become and does not show signs of becoming a mecca for narcotic law violators.

During the past year, 168 arrests were made for violation of the narcotic law, an increase of 22 over the previous year. This is approximately one person out of every 30,000 or so of Florida's population and yearly visitors — not an alarming figure but one which indicates the need for continued vigilance. It is worthy of note that most of the violations occur in the Miami and Tampa areas which have long been known to attract out-of-state violators.

In the overall work of the bureau, 191 arrests were made, 40 more than last year. Twenty-three of these arrests were for other than narcotic violations and included 11 for improper dispensing of drugs (practicing pharmacy without a license), 11 for illegal sale of barbiturates and amphetamines and one for practicing medicine without a Florida license. Additionally, 89 offenders, an increase of 62, were permitted to make corrections without legal action.

Concerning those arrested, the courts took the following action: placed on probation, 9; withheld, suspended or deferred sentences, 57; acquitted, 12; declared insane, 1; nolle prossed, 13; absented, 2. Sixty-six received jail sentences, averaging approximately three years, and 31 were committed for treatment as narcotic patients.

Due to an increased tendency towards leniency in some of the courts, the aggregate fines collected in 1957 totalled only \$4700.00 compared with \$11,150.00 in the previous year, and the aggregate sentences imposed totalled 183 years, 4 months as against 187 years, 2 months. In all phases of enforcement work, the bureau made 1340 investigations of suspected violations, an increase of 269 over 1956. There were 3046 open inspections made of pharmacies, hospitals and other handlers of drugs and narcotics. Inspectors travelled 167,756 miles at a cost of \$7975.97.

Besides the enforcement of the State Uniform Narcotic Drug Act, the bureau is charged with registering annually all practitioners of the healing arts including doctors of medicine, osteopathy, chiropractic, naturopathy, chiropody as well as masseurs and registered physical therapists.

pists. The total number of practitioners registered was 7609, an increase of 556 over 1956. Medical doctors number 6066 which is an increase of 406. Registered drug stores total 1242, 34 more than the previous year.

Early in 1957, the Florida Legislature, after careful investigation, decided that no more naturopaths would be permitted to take up practice in Florida and that those now practicing should come under the direct control of the State Board of Health. The Board of Naturopathy was abolished. This responsibility was added to the duties of this bureau along with the enforcement of Florida's new barbiturate and amphetamine control law.

ADDICTS

Drug addiction is a disease which can only be described as very serious and frequently fatal. The addict is responsible for many crimes as the demands on his system for expensive drugs — often \$50.00 per day or more — force him to go to extremes to satisfy his craving. State law provides for the commitment of addicts to the hospitals of the state prisons (for men and women) for voluntary or compulsory treatment. Private institutions and a Federal hospital in Kentucky also care for voluntary patients. Florida is in dire need of a better institution with proper facilities for the treatment and rehabilitation of drug addicts. Such a place would serve not only the medical needs but the spiritual and social requirements of the patient in order to prepare him for a useful life in the community.

Other states are reporting serious outbreaks of teen-age drug addiction. This has not been a problem of any consequence in Florida but extreme vigilance is being exercised by the inspectors of the bureau to prevent such an event. Complaints concerning teen-age suspects are given priority treatment and most of them are found to be groundless.

OTHER ACTIVITIES

As in all public health work, education is an important part of the activities of this bureau. During the year 60 talks and demonstrations were made before such groups as physicians, pharmacists, nurses, PTA's, school, civic and church organizations. Pamphlets were distributed, articles released to newspapers and radio and television appearances made. Public response and cooperation has been excellent at both the professional and lay level and the bureau looks forward to future years of success in combatting the dread spectre of drug addiction in Florida.

TOTAL SUMMARY OF ACTIVITIES

Number open inspections.....	3046
Number investigations	1340
Number arrests	191
Number violations corrected where no legal action was taken	89
Aggregate sentences imposed by the courts .....183 years, 4 months	
Aggregate fines imposed by courts	\$4700.00
Defendants receiving probation, deferred, withheld or suspended sentences	57
Cases discharged or nolle prosequi by the courts	13
Cases placed on absentee docket	2
Number narcotic addicts confined to State or Federal in- stitutions for treatment	31
Number persons acquitted by the courts	12
Number persons declared insane	1
Number persons placed on probation	9
Number drug stores registered for 1957-58	1242

TABLE 50
MEDICAL PRACTITIONERS REGISTERED WITH THE BUREAU
OF NARCOTICS BY PLACE OF RESIDENCE AS OF
DECEMBER 31, 1957 (EXCLUDES DECEASED PRACTITIONERS)

County	Total	Medical Doctors	Osteopaths	Chiropractors	Naturopaths	Chiropractists	Physical Therapists
Total	7,609	6,066	522	549	238	161	73
Alachua	81	71	3	4	1	1	1
Baker	2	2	..	..	..	..	..
Bay	48	38	4	4	..	1	1
Bradford	8	6	1	1	..	..	..
Brevard	63	50	2	10	..	1	..
Broward	366	271	45	28	11	7	4
Calhoun	5	4	..	1	..	..	..
Charlotte	5	4	..	..	1	..	..
Citrus	7	7	..	..	..	..	..
Clay	11	11	..	..	..	..	..
Collier	13	12	1	..	..	..	..
Columbia	16	15	..	1	..	..	..
Dade	1,584	1,263	101	101	62	40	17
DeSoto	14	9	1	2	..	..	..
Dixie	2	2	..	..	..	..	..
Duval	481	415	16	27	10	7	6
Escambia	129	117	1	10	..	1	..
Flagler	3	3	..	..	..	..	..
Franklin	5	3	2	..	..	..	..
Gadsden	24	22	2	..	..	..	..
Gilchrist	1	1	..	..	..	..	..
Glades	5	5	..	..	..	..	..
Gulf	5	5	..	..	..	..	..
Hamilton	8	7	..	1	..	..	..
Hardee	7	6	1	..	..	..	..
Hendry	7	5	..	2	1	..	..
Hernando	19	16	1	2	..	..	..
Highlands	377	290	18	31	27	8	3
Hillsborough	4	3	1	..	..	..	..
Holmes	4	3	1	..	1	..	..
Indian River	19	14	3	2	..	..	..
Jackson	16	13	1	..	..	..	..
Jefferson	4	3	..	..	..	..	..
Lafayette	1	1	..	..	..	2	1
Lake	51	34	4	10	2	1	..
Lee	49	41	2	3	2	2	3
Leon	70	57	3	3	..	..	..
Levy	3	3	..	..	..	..	..
Liberty	0	..	..	..	..	..	..
Madison	9	7	1	1	..	..	..
Manatee	63	40	9	9	4	1	..
Marion	45	38	3	4	..	..	..
Martin	10	9	..	1	..	..	..
Monroe	28	22	1	3	2	..	..
Nassau	5	5	..	..	1	..	..
Okaloosa	24	20	..	3	..	..	..
Okeechobee	3	2	..	1	..	..	..
Orange	302	228	24	30	12	5	3
Osceola	12	7	3	2	..	..	..
Palm Beach	275	212	13	31	7	6	6
Pasco	26	14	6	5	1	..	10
Pinellas	486	332	52	42	32	18	1
Polk	181	148	8	17	3	4	..
Putnam	17	12	1	3	1	..	..
St. Johns	28	21	2	3	1	1	..
St. Lucie	27	23	2	1	..	..	..
Santa Rosa	7	7	..	..	..	..	..
Sarasota	104	81	4	12	2	4	1
Seminole	29	26	..	2	1	..	..
Sumter	5	4	1	..	..	..	..
Suwannee	7	6	..	1	1	..	..
Taylor	7	5	..	1	..	..	..
Union	2	2	..	..	..	..	..
Volusia	149	104	21	11	2	6	5
Wakulla	2	2	..	..	..	..	..
Walton	7	6	..	1	..	..	..
Washington	5	5	..	..	..	..	..
Out of State	2,230	1,848	157	123	48	44	10

BUREAU OF ENTOMOLOGY

J. A. MULRENNAN, B.S.A.
Director

The year 1957 will go down in history as one of the most unusual and adverse climate wise. Weather conditions, more so than any other factor, affect greatly the production and control of mosquitoes and other arthropods of public health importance.

The year was one of the wettest, warmest and coldest that had been experienced in many years. The year started with exceptionally warm weather followed by intermittent rains. Such conditions triggered early salt-marsh mosquito breeding along the eastern coast of the state. The breeding continued to be extremely annoying throughout the summer months. On the western coast of the state, just the opposite occurred as far as salt-marsh mosquitoes breeding was concerned. In this section all of the mangrove swamps that had bred so terrifically the previous year from being dry from lack of rainfall and flooded once a month by high tides, were flooded by early spring rains in 1957 and all swamps remained flooded for the remainder of the year. The main salt-marsh breeding was encountered along the fringe areas and this did not cause great annoyance.

The principal mosquito annoyance on the west coast of the state was caused by the glades mosquitoes, *Psorophora confinnis*. It can be expected in the future that this mosquito will become more of a problem as far as the human population is concerned. The building in many of the coastal areas is now moving out into the flat woods and pasture areas which are typical for the breeding of this particular species of mosquito.

The southern part of the state can also expect more annoyance from the *Mansonia* mosquitoes. This has been brought about by the rapid spread of water lettuce. The cold weather during December killed a considerable amount of the plant population. Continued cold winters would assist greatly in keeping the plant under control which in turn would reduce the *Mansonia* mosquito populations.

A new mosquito problem was encountered during the past year. In many of the truck crop areas in the central part of the state, it has become necessary to flood the fields during the summer months in order to control nematodes. The flooding of the fields has in some sections brought about terrific breeding of the *Culex nigripalpus* mosquito. In the past this mosquito under natural conditions has never been found in sufficient numbers to be considered a pest in the state.

The bureau is trying to perfect methods to control this species in the fields by introducing thousands of minnows at the time of flooding. It is hoped that this method will be effective, otherwise it will be necessary to consider larvicidal measures which will be repetitive and expensive.

A salt-marsh mosquito flight survey has been carried on in the southern part of the state for a number of years. The data has been analyzed sufficiently to show that it would be possible under extreme conditions to expect some salt-marsh mosquito invasion from the distant mangrove swamps on the western coast of the state into the City of Miami. From the information at hand, it can be stated with almost certainty that the Homestead area will be invaded quite frequently from mosquitoes breeding in the southern and western tip of the state under conditions of extended western winds for a period of two or three days.

It must be reported that there is no known solution at this time for eliminating the breeding in this vast breeding area encountered in the Everglades National Park. The only relief that can be afforded the citizens living in this section is to fog and airplane spray the populated areas as soon as the flights enter the housing areas, to destroy the adult mosquitoes.

The Civil Aeronautics Administration caused considerable consternation in the state at the onset of the mosquito breeding season when they ruled that no single-engined plane could fly over and disperse insecticides over a populated area. They ruled that only two-motored planes could be used over populated areas.

The bureau has been working for almost a year with the State Auditing Department in developing new report forms and bookkeeping methods to be instituted in all mosquito control districts and counties. It is expected that the new reporting system will be placed in operation on January 1, 1958.

The overall progress in eliminating salt-marsh breeding areas and keeping down other arthropods affecting the health and comfort of Florida's citizens, has been satisfactory during the past year. However, there is still room for considerable improvement and it is expected that the new report forms will be of great assistance in making more accurate analyses of the work being performed.

The dog fly, *Stomoxys calcitrans*, which in the past has been a serious pest on the gulf coast of Florida, was kept under control the past season.

The work of the Entomological Research Center at Vero Beach is continuing to pay dividends in demonstrating the resistance problem and showing what chemicals are effective in all the phases of arthropod control.

As far as we have been able to determine, there have been only five arthropod-borne diseases reported in the state during the past year. There were five cases of typhus and this was the lowest number of cases to be reported in many a year.

The state legislature increased the aid to counties for mosquito control from \$1,250,000.00 a year to \$1,750,000.00. As is reported under the research section, the legislature appropriated \$40,000.00 to extend the

facilities at the research center in Vero Beach. It is also our understanding that the U. S. Public Health Service has recommended \$25,000.00 for building construction there. Final confirmation is expected in the early part of 1958.

The local areas appropriated \$2,446,869.23 for arthropod control.

It is our feeling that great strides were made during the past year in all phases of arthropod control, but it must also be remembered that man is also creating new and adding to many of the old problems, such as the impounding of water, increasing production material for housefly breeding and the building of homes in or near heavy mosquito producing areas, where the source of breeding cannot be economically eliminated by any methods of water and land management.

The bureau has been able to obtain sufficient qualified personnel to carry out the control operations, but we have not been successful in finding qualified personnel to fully staff the research activities in the state. Unless we can rearrange the classification set-up and offer higher salaries, it can be expected that the state will have an inferior research program, and we will be placed in the position of being able to obtain funds from the State and Federal government, but unable to obtain qualified personnel to carry out the research programs.

ENTOMOLOGICAL ACTIVITIES

There has been a continuous provision of entomological and engineering assistance to counties and mosquito control districts in matters pertaining to their arthropod control programs. The central office field staff, aside from the director, includes two sanitary engineers, two entomologists, and one clerk; all of whom work throughout the entire state. One staff entomologist is in charge of entomological field activities, and the other is in charge of enforcement activities of Florida's Structural Pest Control Laws. Four additional entomologists serve a number of counties and mosquito control districts in their assigned regions.

The field activities of the entomologists during the year were carried out with the counties and mosquito control districts in an atmosphere of cooperative achievement. Some of these entomological activities consisted of direct assistance in defining various arthropod problems; outlining and studying mosquito and sandfly breeding areas; training district and county personnel to perform entomological investigations; the development of work plans and budgets; reviewing mosquito control projects proposed in work plans by the districts and counties; assisting in the evaluation of mosquito adulticiding operations; and the giving of other technical assistance in any capacity necessary toward the achievement of more efficient and more effective arthropod control in the counties and districts carrying on this very worthwhile and necessary public service.

In addition, all regional entomologists assisted with the enforcement of Florida's Structural Pest Control Laws and State Board of Health

rules and regulations promulgated thereunder. Further, all field entomologists gave assistance to county health departments, communities, municipalities, and private individuals, when called upon, in studying and recommending control measures for various arthropod problems. One such problem existing in most of the counties of the state is housefly breeding in manure from caged hens on egg farms.

A very important activity was the participation in the training courses for sanitarians. It is felt highly important that the sanitarians have a basic knowledge of the more common insects and other arthropods they will be called upon to recognize and offer recommendations for control.

ARTHROPOD IDENTIFICATION LABORATORY

This bureau has, for many years, maintained a laboratory at the central office for the purpose of identifying structural pests and arthropods of public health importance — principally mosquitoes. Coincidental with the functions of the laboratory, the bureau has conducted a light trapping program for the purpose of studying the mosquito and midge fauna throughout the state. In early 1954, the bureau expanded the light trapping program to obtain further faunistic information and to establish a network of traps which would serve as indicators of the effects of the permanent mosquito control efforts inaugurated in late 1953.

This program has continued, and during the year, laboratory personnel identified more than 1,947,000 mosquitoes and midges in 11,468 collections made from semi-weekly operation of approximately 125 New Jersey-type light traps. In addition, 3454 mosquito larvae were identified and numerous miscellaneous identifications were made of various arthropods sent in by mosquito control districts, county health departments, private physicians, structural pest control operators, and other individuals requesting identification and recommendations for control.

The laboratory personnel continued the weekly distribution of the FLORIDA SALT-MARSH MOSQUITOGRAM, an information sheet giving semi-weekly collection counts of salt-marsh mosquitoes in 43 mosquito light traps selectively located along the coastal areas of the state. This sheet provides continuous information on salt-marsh mosquito populations in the coastal counties and mosquito control districts in which the traps are located. The bureau also furnishes each county and district engaged in mosquito control activities a monthly and annual summary of the various species of mosquitoes collected in each trap within their boundaries.

MALARIA AND TYPHUS SURVEILLANCE

The incidence of endemic typhus in Florida during 1957 was the lowest ever recorded. Only five cases were reported, and three of these were reported from Dade County. An interesting aspect of these Dade County

cases was revealed by epidemiological tracing, which indicated that the cases were sharply localized in an area surrounding a grain storage warehouse that burned, presumably dispersing the infected rats into the surrounding neighborhood. Since endemic typhus is spread to human beings by the rat flea, *Xenopsylla cheopis*, a close surveillance is maintained in areas surrounding case foci, and the application of DDT dust to rat runs for the destruction of the fleas is considered highly important in the prevention of further spread of the disease in such areas.

The absence of malaria transmission in Florida has been continuous since 1948. There have been no cases of the disease confirmed as being indigenous to the state since an incipient outbreak occurred, but which was quickly brought under control at Naples, during that year.

A good share of the credit for the low incidence of typhus and the absence of malaria transmission may be attributed to the county health departments and the two Bureau of Entomology district supervisors stationed in their assigned areas of the state. These men work in close cooperation with county health departments in promoting rat control and arthropod control in both rural and urban areas and in maintaining close surveillance against the resurgence of malaria and typhus.

A six-year comparison of the incidence of malaria and typhus is shown in the following tabulation:

Year	Malaria	Typhus
1952	50	11
1953	19	10
1954	11	6
1955	13	11
1956	11	6
1957	14	5

STRUCTURAL PEST CONTROL

This bureau is the enforcement agency of the Structural Pest Control Act of 1947, as amended, the Thermal-Aerosol Act of 1949, and the respective rules and regulations appertaining to each as promulgated by the State Board of Health.

In November 1957, the rules and regulations pertaining to the Structural Pest Control Act were carefully reviewed and revised to conform with recent trends of the pest control industry. The pest control industry attempted unsuccessfully to amend the Pest Control Act for the purpose of clarifying certain legal interpretations of said Act.

This bureau has continued its efforts to cooperate with the pest control industry in its program to raise the general standards of workmanship and to improve public relations between the industry and the property holders.

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The investigations of complaints by this agency, and other irregularities in the industry were comparable to the previous year. Since 1953, the number of pest control operators receiving annual identification card licenses from this office has more than doubled in the last four years. The number of licensed pest control business locations has increased eighteen and one-half per cent (18½ per cent) during the same period.

Registrations	Calendar Years				
	1953	1954	1955	1956	1957
State Board of Health Licenses issued	184	196	202	210	226
State Board of Health Licenses revoked	0	0	3	1	2
State Board of Health Licenses placed on probation	0	0	0	0	6
Employees Identification Card Licenses issued	789	910	1,013	1,485	1,738
New Thermal-Aerosol Certificates of Authorization issued	3	1	1	0	4
Thermal-Aerosol Certificates of Authorization renewed	18	19	16	14	13
Thermal-Aerosol Certificates of Authorization revoked	0	0	0	0	0
<i>Investigations</i>					
Homeowner complaints investigated .....	.....	.....	110	90	91*
Number of non-licensed questionable illegal pest control operators investigated....	.....	.....	34	15	22
Number of charges preferred against non-licensed illegal pest control operators	8	3	2

*9 additional cases are pending.

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The following counties participated in the state arthropod control program during the year. Based on the fiscal year of the counties, and as of the end of the calendar year 1957, the local budgets for arthropod control activities are shown:

Alachua	\$ 17,000.00	Leon	25,000.00
Bay	43,649.82	Madison	1,808.20
Bay (Panama City Beach)	26,686.59	Manatee	36,500.00
Brevard	428,378.59	Martin	23,067.15
Broward	55,000.00	Monroe	77,800.00
Bradford	13,000.00	Nassau	35,592.16
Calhoun	4,087.69	Okaloosa	17,356.92
Charlotte	15,000.00	Orange	5,000.00
Citrus	23,357.98	Osceola (Kissimmee)	4,500.00
Collier	24,020.89	Osceola (St. Cloud)	2,000.00
Dade	200,000.00	Palm Beach	131,500.00
Duval	57,044.55	Pinellas	167,769.26
Escambia	64,770.00	Pasco	11,826.72
Flagler	13,337.15	Polk	95,000.00
Franklin	9,000.00	St. Johns	35,800.00
Gadsden	1,377.60	St. Lucie	75,573.59
Gulf	17,500.00	Santa Rosa	13,500.00
Hernando	2,000.00	Sarasota	62,823.03
Hillsborough	130,897.48	Suwannee	5,000.00
Indian River	135,943.66	Taylor	1,500.00
Jackson	900.00	Volusia	183,226.10
Lake	27,725.00	Wakulla	18,074.12
Lee	70,944.92	Walton	2,000.00
Lee (Ft. Myers Beach)	22,530.06	Washington	2,500.00
Levy	8,000.00	Total	\$2,446,869.23

SOURCE REDUCTION ACCOMPLISHMENTS

The emphasis in arthropod control has continued to be toward elimination of mosquito breeding areas and source reduction of other arthropods.

The following tabulation shows accomplishments during 1957, as compared with the previous year, of major items of work performed by mosquito control districts and counties in their intensified efforts toward the elimination of breeding areas:

	1956	1957
<i>Hydraulic Dredging</i>		
Cubic Yards of earth fill placed.....	1,367,133	1,428,786
Acres of mosquito breeding area eliminated....	631	716
<i>Deepening, Filling & Grading</i>		
Acres of mosquito breeding area eliminated....	741	315.75
<i>Diking</i>		
Miles of dike constructed	77.4	24.24
Cubic yards earth moved	803,043	246,922
Acres of mosquito breeding area diked	4,486	1,114

<i>Ditching (New construction & maintenance combined)</i>		
Miles machine ditching	374.25	486.05
Miles hand ditching	236.62	157.40
Miles dynamite ditching	0	6.47
<i>Cisterns, Cesspools, Wells, etc. filled</i>	179	170
<i>Sanitary landfills operated</i>	28	32
<i>Vertical Drainage</i>		
No. holes blasted	0	235
No. acres mosquito breeding area eliminated	0	310

ENTOMOLOGICAL RESEARCH CENTER ACTIVITIES

MAURICE W. PROVOST, Ph.D.
Director

The Entomological Research Center at Vero Beach expanded its staff somewhat but ended the year still shy of the research personnel needed to meet all its obligations. For the first time, National Institutes of Health (USPHS) research grants entered the picture, in the amount of \$39,500 this first year. Difficulty in procuring personnel necessitated the expenditure of most of one section's (Ethology) efforts in meeting the grant commitments. The Physiology section remains still underdeveloped. The Ecology section made considerable progress during the year. The Control Research section made an outstanding showing during the year in spite of space problems. The 1957 Legislature appropriated \$40,000 for a Control Research laboratory to be built as a separate facility of the Center. It is hoped that matching federal funds can be obtained to help build and equip this facility and an application for it was pending at the year's end. Also at the end of the year land was being purchased across the road from the Center to accommodate the proposed Control Research facilities.

The Chironomid midge or "blind mosquito" problem was given considerable attention. The preliminary surveys in the Winter Haven area produced collections analysed by the Center's taxonomy laboratory (under Mrs. Nina Branch) as follows: 4274 chironomid larvae identified, lake plankton identification and counts made from 100 water samples, and plankton identification and counts made in determining the stomach contents of 284 *Glyptotendipes paripes* and 118 *Chironomus decorus*. Based upon the ecological surveys of 1956, a mimeographed report was prepared entitled "The production of chironomids in the lakes of the Winter Haven area: Preliminary study." This report was in turn the basis for proposals for an organization in Winter Haven to study the biology and control of chironomid midges. Such an organization was established under the direction of Dr. Edward H. Warnhoff, with the Bureau of Entomology and Bureau of Sanitary Engineering cooperating (See its report elsewhere). The Center was given the responsibility of supervising the research on this project.

The taxonomy laboratory identified and enumerated species of mosquitoes, sand flies, and midges collected for various purposes by the field research men of the center. Special projects included (1) analysis

of plankton in the lakes of the Winter Haven area and the corresponding plankton in chironomid larval stomachs, (2) identifying and counting the contents of collections in a special study of mosquito pupation in the field, (3) compilation and analysis of light trap data from past ten years for a study of weather factors affecting light-trap efficiency, (4) preparation of light-trap data sheets for a study of mosquito species distribution and abundance in Florida. The latter project received statistical assistance from the draftsman, who doubles as statistician.

The library developed its journal series during the year and put the special classification scheme into operation on both its books and separates. It is expected to soon have all its thousands of separates integrated through cross-indexing into the card-file system. The librarian has also become an efficient procurer of literature for all research personnel, either through purchases, inter-library loans, or photo-duplication.

Most of the research personnel devoted a large portion of the year to the preparation of manuscripts for publication. This year and the next will see a large number of publications by staff members much of which represents a backlog of information which had accrued and been left unpublished.

1. ETHOLOGY SECTION

The colonization of *Aedes taeniorhynchus* was achieved and by December the colony was in its seventh generation. The two facts, (1) increased egg viability with age of colony and (2) changed light requirements for mating, suggest that active selection for domesticity may be going on. Colonization of another "wild" mosquito, *Culex nigripalpus* has so far not been successful. During the year, insectary colonies of *Anopheles quadrimaculatus*, *Aedes aegypti*, and *Culex quinquefasciatus* were established without difficulty. All these colonies yield insects for studies on NIH grants, for insecticide resistance and control studies, and for other projects of the Center.

Larval aggregations of mosquitoes were experimented with by Dr. P. T. M. Lum in an effort to segregate innate gregariousness from environmentally (food, light, temperature, etc.) induced groupings. Adult male aggregations ("swarms") were studied further by Dr. E. T. Nielsen in attempts to arrive at the causative mechanisms. Males of *Culex quinquefasciatus* were made to swarm at will in a specially designed swarming chamber. Data on *Aedes caspius*, gathered in Iraq, were analysed for correlations with environmental factors which had been measured in detail, and a significant association between light intensity and extension of antennal fibrillae was studied both from these records and with current data from the swarming chamber.

Diurnal activity rhythms governed by light were studied in the actograph for the young adults of *Aedes taeniorhynchus*. Though sixteen experiments were performed, resulting data are still all in the preliminary stages of analysis.

Pupal duration in *Aedes taeniorhynchus* as a function of temperature has been established very precisely in an improved apparatus. The automatic device records on film the various ecdyses in large numbers of mosquitoes to within eight and one-half minutes and at temperatures controlled to within 1/10 degree Centigrade.

2. ECOLOGY SECTION

The main Center weather station was established, with continuous recording of barometric pressure, wind direction and speed, sunshine, temperature and relative humidity. Substations in different habitats were established also, for temperature and humidity especially. The first recording tide gauge was placed into operation in the Hob Horse Cove study area.

An analysis of Florida climate as affecting mosquitoes was made, using U. S. Weather Bureau data and the new information from the Center weather station. The compilation was prepared for distribution as a mimeographed circular.

Dr. R. L. Blickle, an authority on *Tabanidae*, was employed during the six months of his sabbatical leave from the University of New Hampshire, to make a horsefly survey of this area and to train Center personnel in tabanid identification and research. While here he (1) developed excellent collecting and rearing methods, (2) worked out the ecological and seasonal distribution of 32 local species of horsefly, (3) made an intensive study of the swarming and mating behavior of one species, (4) made a special ecological study of another species, and (5) prepared the seasonal distribution of 101 Florida species of horseflies according to the literature.

Ecological and rearing studies of *Culicoides furens* were continued through the year. A new larval recovery method was developed which is much more efficient than sampling methods used in the past. Observations were made of larval responses to water level fluctuations. Adult resting habits were studied with a newly developed power aspirator. In the laboratory, first generation larvae have been produced but true colonization has not yet been achieved. With abundant larval food one generation in the laboratory has been completed in 30 days. All this *Culicoides* work has been done by Mr. W. L. Bidlingmayer alone.

Dr. R. W. Harrington gave an invitational paper on photoperiodism in fishes at the "International Symposium on photoperiodism in plants and animals and related phenomena" sponsored by the National Research Council, at Gatlingburg, Tennessee, the contribution to appear in a book to be published on the symposium. At the annual meeting of the American Society of Ichthyologists and Herpetologists in New Orleans, Dr. Harrington was elected to the board of governors of the Society and to the editorial board for *Copeia*, the Society's journal. In November, his application for a five-year NIH research grant for studies on the biology of larvivorous salt-marsh fishes was favorably acted upon. Besides pre-

paring a number of manuscripts for publication, the year's work included (1) biometrical studies on two salt-marsh fish species later to be sacrificed for dietary studies, (2) compilation of combined fish collections in marshes and adjacent shallows in anticipation of later dietary and biometric studies, (3) measurement and statistical analysis of environmental factors in the reproduction of two species of *Fundulus*, and (4) bibliographic work in anticipation of dietary studies. Late in the year, the discovery on the salt marsh of actual, unhatched eggs of *Fundulus* opened up several lines of future research.

3. PHYSIOLOGY SECTION

Toward the end of the year the first experiments were set up designed to study the respiratory metabolism of mosquitoes.

Investigations on the determination of the ages of adults of salt-marsh mosquitoes were pursued along both morphological and physiological lines by Dr. P. T. M. Lum. The morphological investigations involve dissections of adults of various ages and examination of the conditions of the different internal organs such as ovaries, fat bodies and stomachs. A means of determining age by such methods may develop. The physiological approach is utilizing chromatographic techniques to detect various quantities of metabolites, amino acids or proteins which may increase or decrease with adult age.

4. CONTROL RESEARCH SECTION

Adulticides:

In tests with thermal-aerosols in 1957, adult salt-marsh mosquitoes from Lee, Sarasota, Citrus, and St. Johns Counties were no different in their susceptibility to DDT than were mosquitoes from Indian River County. Specimens from Dade and Monroe Counties were approximately twice as susceptible, and those from Chatham County (Savannah), Georgia were about four times as susceptible to DDT as were Indian River County specimens.

No correlation could be shown between the amount of DDT previously used in a county and the present susceptibility to DDT of salt-marsh mosquitoes from that area. Since little or no quantitative data are available to accurately show the original toxicity of DDT to mosquitoes in the areas studied, it is not possible to explain the results of those tests on this basis. Any other explanation would be hypothetical; therefore, none is attempted at this time.

The tests showed conclusively that DDT, as normally used in fogging devices, is not effective in controlling adult salt-marsh mosquitoes in Florida. Malathion in these tests at a slightly lower dosage than DDT generally gave good kills of salt-marsh mosquitoes and no difference was found in the toxicity of this chemical to mosquitoes in any of the areas studied.

A companion study compared, without regard to geographical origin, the toxicity of DDT to adults of several species of mosquitoes. Although not quite completed, test results to date show the following per cent kills with DDT in a swath of 330 feet. *Anopheles quadrimaculatus*, 81 per cent; *Aedes aegypti*, 79 per cent; *Psorophora confinnis*, 61 per cent; *Aedes sollicitans*, 30 per cent; *Aedes taeniorhynchus*, 22 per cent; and *Culex quinquefasciatus*, 21 per cent. Kills were somewhat lower for all species in a swath of 660 feet.

Larvicides:

Research on larvicides in 1957 showed that paris green in granular formulation can effectively control larvae of *Aedes* and *Psorophora* as well as *Anopheles*. The formulation developed in this study is paris green on vermiculite using oil emulsion as a sticker.

The problem in 1958 will be to work out effective and economical means of dispersing this formulation by aircraft.

It is expected that if this objective can be accomplished, there will be available a larvicide which can be used with a high degree of safety to man, fishes, and wildlife, and with much less chance of the mosquito population becoming resistant to the chemical.

SOURCE REDUCTION METHODS:

Research on methods of reducing the production of mosquitoes at their source was confined to salt-marsh *Aedes*, primarily in Indian River and Citrus Counties. Plans to initiate long-range research projects on water management in the impoundments of Brevard County were abandoned due to a shortage of technically trained personnel.

In Indian River County, a sixty-acre marsh was divided into plots of approximately five acres each to initiate a long-range study of water-management. The purpose of this project will be to determine the best method of managing water in impounded salt marshes to reduce mosquito production and at the same time not be destructive to fishes and wildlife. Actual construction on this project will not be completed until 1958. This is a cooperative effort between the Indian River Mosquito Control District and the Center.

Studies in Citrus County during 1957 resulted in progress in defining the salt-marsh mosquito problem in the estuaries of the Homosassa and Crystal Rivers. Entomological inspections showed that in 1957 heaviest production of salt-marsh mosquitoes occurred at higher elevations in the marsh, especially at margins of islands and the mainland periphery of the salt marsh. No heavy breeding of mosquitoes was found in large expanses of the marsh where *Juncus roemerianus* occurred in almost pure stand.

Water management studies in Citrus County included both drainage and impounding by means of automatic tide gates. Both methods gave

encouraging results, and it is expected that by the end of 1958 it will be possible to evaluate these source reduction methods as they apply to Citrus County conditions.

MIDGE RESEARCH BY THE BRANCH LABORATORY AT WINTER HAVEN

In February work was begun on the remodeling of a building to be used to house a midge research laboratory. This work was completed in April and the actual operation of the laboratory began. With the advice of the Center at Vero Beach a tentative program was decided upon.

Previous workers from the State Board of Health had surveyed 13 lakes in the area and data was recorded and analyzed by the Center. Since the inception of this laboratory studies have been made on six additional lakes. All of the selected lakes are visited at least once a month, and it is hoped in the future that all the lakes can be visited twice monthly. Each lake is sampled for insect larvae and at the same time temperature and pH readings are made of the water. At least two water samples from each station are bottled and returned to the laboratory for further chemical and biological analyses. In all, 1756 water samples were taken.

During the period covered by this report 1757 larval samples have been made and of that number 1015 showed the presence of midge larvae. There were over 14,100 larvae identified from the sampling. Identifications and counts are made of the zooplankton and phytoplankton populations from the water samples to give an indication of food materials present for larval consumption. A life history study of the insect is also in progress.

CONTROL STUDIES

Larviciding:

Profiting from the experience of others who have attempted radical control of the midge in the field it was decided that any larvicide should be screened in the laboratory before being taken to the field. In all, 23 insecticides and related materials have been screened. More study is planned on this type of test.

In very limited field tests with larvicides EPN wettable powder was used at the rate of 0.125 pounds of active material per acre. These tests showed approximately a 68 per cent reduction in larvae populations 72 hours after treatment.

Malathion incorporated on oyster shell and broadcast by use of a Buffalo Turbine mounted on a boat gave only about an eight per cent reduction after 72 hours when used at the rate of 0.4 of the actual material per acre.

Adulticiding:

Adulticiding tests were conducted to find effective materials and rates of application. The tests were all made using thermal-aerosol applicators. DDT used at the rate of five per cent (w/w), Malathion 0.27 pounds of active material per acre plus Lethane 384 (3 per cent v/v), and Malathion at 0.54 and 0.27 pounds per gallon gave very good control.

Methods of application, especially from a boat, were tried and it is believed this method in conjunction with ground equipment might be helpful in control of the midge pest.

Articles by staff members:

- Beck, E.C., Two new species of *Culicoides* from Florida (Diptera:-Heleidae). Fla. Entom. 40:103-105, 1957.
- Bidlingmayer, W.L., Studies on *Culicoides furens* (Poey) at Vero Beach. Mosq. News, 17:292-294, 1957.
- Harrington, R.W., Jr., Sexual photoperiodicity of the cyprinid fish, *Notropis bifrenatus* (Cope), in relation to the phases of its annual reproductive cycle. J. Exp. Zool. 135:529-553, 1957.
- Nielsen, E.T., Use of the electronic flash to record the activity of small animals. Nature, 179:1308, 1957.
- Provost, M.W., The dispersal of *Aedes taeniorhynchus*. II. The second experiment. Mosq. News, 17:233-247, 1957.
- Rogers, A.J., Beidler, E.J. and Rathburn, C.B., Jr., A progress report on dosage tests with mosquito adulticides. Mosq. News, 17:190-194, 1957.
- Rogers, A.J., Beidler, E.J. and Rathburn, C.B., Jr., A cage test for evaluating mosquito adulticides under field conditions. Mosq. News, 17:194-198, 1957.

BUREAU OF DENTAL HEALTH

FLOYD H. DeCAMP, DDS
Director

To acquaint the general public and the individual with proved preventive measures and to educate them on their most effective use in the control of dental disease are the principles upon which this bureau plans its overall program.

DENTAL HEALTH EDUCATION

The educational program of this bureau is one of the most effective means of carrying out the objectives of a state-wide program. Phases of the educational program being emphasized are adequate nutrition, restriction of excessive sweets and carbohydrates in the diet, good mouth hygiene, early and periodic visits to the family dentist and community fluoridation.

The bureau's full-time health educator returned in July with an additional Master's degree in Public Health. Since her return, her field work has been in six counties where she did preplanning and educational work for the visit of the mobile dental clinic, in-service teacher training programs, the planning of radio and television presentations, and participation in individual and group conferences of those planning long-range dental programs. Teachers' meetings and classroom work were carried on in Gainesville where the U. S. Public Health Service School Dental Care Program is being conducted.

Approximately 200 packets of materials for teaching dental health in grades one through twelve were distributed and in addition 20,000 pieces of educational material on various dental subjects. Exhibits were provided for various health meetings. Dental educational programs for state institutions were begun at Florida School for Girls at Ocala. The routine practice of meeting with white and Negro health education classes in colleges and universities throughout the state was resumed. In an effort to recruit future dental personnel, talks were given in high school Career Day programs.

The ever increasing interest and educational activities of local dental societies warranted more time of the health educator with local dental public relations committees. New pamphlets and leaflets were written to meet the needs of local dentists and other health personnel.

The multitude of state-wide activities by this bureau motivated many local groups (with funds) to put money and effort in preventive and long-range dental care programs. As an example, a civic group in one county purchased complete equipment for a new dental clinic.

Many films, filmstrips, and other audio-visual aids were reviewed and evaluated before purchase. Factual and illustrated materials on dental

health were made available for free distribution by the Division of Health Information. There are more requests for dental films than any other films in the audio-visual aids library.

In connection with the *Dental Preceptorship Program*, pilot schools were chosen in four areas to demonstrate the merits of a well-rounded health education program, accompanied by adequate dental corrective service. From these pilot schools convincing evidence is being accumulated from school superintendents, teachers, parents, dentists, nurses, and healthier children that will encourage additional schools to establish similar programs.

The health and teaching professions realize the optimum health for the school child begins before he enrolls in school. This bureau is helping in the education of parents of these preschool children.

Parent-Teacher Association group programs on dental health have been given by members of the State Dental Society in a large number of counties. Many of the present fluoridation programs, and those soon to start, had their foundation laid by these interested parent-teacher groups.

FLORIDA DENTAL PRECEPTORSHIP PLAN

A progressive step was initiated this year by the State Board of Dental Examiners to assist this bureau in securing public health dentists to staff the various county health department full-time dental programs already established, or proposed new county or city dental departments. Heretofore it was almost impossible to secure public health dentists.

This plan was initiated by the Board of Dental Examiners in July 1957, and was approved by the State Dental Society and the State Board of Health. It is known as the *Florida Dental Preceptorship Plan* and it permits the State Board of Health to employ recently graduated dentists on a full-time basis exclusively in the field of dental public health on an intern or preceptorship basis for a period of one year or more prior to taking Florida State Board Examinations for licensure.

A preceptor serves under the direction of the physician directing the county health department to which he is assigned and receives advisory supervision from this bureau and from a preceptorship committee from the local dental society.

The State Board of Dental Examiners selects these public health dentists from applicants who have furnished this bureau and the Board of Dental Examiners with their personal records and transcripts of their pre-dental and dental school scholastic records. Selection is made on the basis of competitive grades and recommendations of the deans of the dental schools from which the students were graduated.

A large number of applications have been received and seven dentists were employed in the fall. Several others who were officially approved for preceptorship positions were unable to accept because of military

obligations. Additional preceptors will be accepted to meet the needs of the counties.

Before the adoption of the plan, a number of county health departments budgeted funds to operate county or city dental programs but were unable to obtain dentists.

The State Board of Health has set aside funds for special post-graduate training in children's dentistry and dental public health either in Florida or in selected dental schools.

DENTAL HEALTH WORKSHOP

Continuing the plan adopted in 1956, a second joint two-day dental workshop was held at the Medical Center, University of Florida, Gainesville, in November. Plans for the meeting and its program were arranged jointly by the director of the State Dental Society and the director of this bureau. Those in attendance were State Dental Society Executive Officers, Public Relations Committee members, Advisory Committee to the Bureau of Dental Health, dental members of this bureau, and the preceptorship public health dentists.

Participating in this program were representatives of the School of Education, University of Florida; Director of Public Relations, Florida State University, and the State Department of Education.

The main discussions concerned methods of coordinating dental health education with general health teaching in textbooks and classrooms, increasing the dental health knowledge of our teachers, research and how it can be used as a public relations tool, and the current state dental health program.

FLUORIDATION

Education of the general public on the importance and effectiveness of water fluoridation as a preventive measure against dental caries was one of the major phases of this bureau's program. Increased interest was shown by civic groups and the general public in this safe, economical, and efficient method in the control of dental caries. Ormond Beach was the only area in the state where a fluoridation referendum was held. It was successful.

More than 50 packets containing informational material on fluoridation, plus another 4196 pieces of fluoridation literature were distributed throughout the state. In addition, this bureau assisted in preparation and presentation of radio and television programs on fluoridation.

MOBILE DENTAL UNIT

The services of a public health dentist were obtained late in the year and the mobile dental corrective unit was operated for only three and one-half months. An extensive program was conducted in the southern

end of one of the larger counties where there are an insufficient number of practicing dentists to take care of the lower elementary grades. The service included dental examinations of all the children in eleven schools. Corrective service was made available to underprivileged children in the lower elementary grades. This program was sponsored by the local Soroptimist Club which contributed approximately \$700 to the project.

The clinic operator gave instructions on diet and oral care to the patients, presented classroom and PTA talks on dental health and distributed dental health literature. The program received excellent community participation.

The schedule of the mobile dental clinic is always arranged, if proximity of communities permits, in the date order the request are received.

LACTOBACILLUS COUNT SERVICE

Twice the number of saliva specimens was sent to the laboratory in 1957 as were sent in 1956, and indicates the growing interest of the dentists. The service was established in mid-1955 to aid the private dentists in their effort and that of this bureau to control dental caries by showing the value of restricting the excessive use of sweets and carbohydrates in the diet. The laboratory techniques employed were developed from those used by the University of Michigan, School of Dentistry. A bacteriologist from the State Board of Health laboratory attended an orientation and refresher course at the University of Michigan in 1957.

By invitation of the Florida Society of Dentistry for Children, two members of the Sanitary Bacteriology staff presented a demonstration clinic at the annual convention of the American Society of Dentistry for Children, Miami.

FAIRS

A free dental bitewing X-ray program and dental health educational booth, for the fourth consecutive year, was conducted at the State Fair, Tampa, January 29—February 9. The State Board of Health, Hillsborough County Dental Society, and the Tampa Dental Assistants participated jointly in the project, contributing more than 690 man hours.

The usual method of conducting an X-ray program was used. Each child who was X-rayed was required to first present a signed permission slip from parent or guardian. The X-rays were taken, placed in an envelope, sealed and given to the child to deliver to his parents. The envelope carries a message to parents urging them to take the unopened envelope, within thirty days, to the dentist of their choice who will develop the films and explain them — free of charge. If treatment is indicated, he will so advise them. The envelope contains an evaluation

card and the dentist receiving the films is asked to fill out the card, sign it, and return it to this bureau. A large number of X-rays were taken and the returned cards enables this bureau to evaluate the project. The value of this project justifies the small cost involved.

Dental health pamphlets supplied by the Board of Health and other public health groups were distributed to the children who were X-rayed and to those persons visiting the booth who were interested in receiving them.

For the second year, this bureau cooperated with the Jacksonville Dental Society in its presentation of a dental X-ray program at the fair grounds, Jacksonville. The same procedures used in Tampa were followed. Members of the Jacksonville Dental Society and their dental assistants gave their time and service. This bureau assisted with dental health materials and other supplies.

COUNTY HEALTH DEPARTMENT DENTAL CORRECTIVE CLINICS

Broward — Prior to employment of a full-time public health dentist in September, the two dental corrective clinics in this county were staffed by local dentists.

Dade — The corrective clinic here was operated on a part-time basis for the first nine months of the year. Beginning October 1, the clinic has been under the direction of a full-time public health dentist.

Duval — The clinic was operated eight months of the year — all on half-time basis. One half-time dental preceptor is now assigned to the county. The City of Jacksonville Dental Clinic also uses him on half-time basis.

Hillsborough — The dental program was inactive until a full-time public health dentist (preceptor) was employed the latter part of the year.

Orange — Continued to operate its full-time clinic with one public health dentist.

Palm Beach — As in the past, Palm Beach operated with one full-time dentist.

Pinellas — Two clinics — one full-time dentist and one dentist on a part-time basis.

Polk — One full-time dentist.

Brevard — With assistance of funds from the local Board of Public Instruction, a dental hygienist is employed on a full-time basis. The reports show that an excellent job has been done.

The reports from the above dental corrective clinics show the great need for additional dental personnel and more dental health education activities. In each county surveys are made or dental examinations are done, and underprivileged children are given corrective service.

SPECIAL SURVEYS

During 1957, this bureau cooperated with the U. S. Public Health Service in making a survey of institutionalized aged persons, to determine their dental conditions and needs. This was one of the first surveys of its kind to be done. In four counties 700 residents of twenty-one homes for the aged were examined. Extensive valuable dental information was obtained. This study is now in the process of being evaluated. The results will be presented in the 1958 report.

BUREAU OF FINANCE AND ACCOUNTS

FRED B. RAGLAND, B.S.
Director

In carrying out the business management of the agency, this bureau attempts to give maximum assistance to program and activity directors of the agency in planning and executing the complex financial program, as well as keeping the State Health Officer and members of the Board advised as to expenditures in relation to budgeted funds.

Being a legislative year, 1957 brought forth new challenges to the agency since some established programs were strengthened and new programs put into operation resulting from new Legislative Acts.

With reference to appropriations, the 1957 Legislature in the General Appropriations Act substantially increased funds for the agency. In addition to a modest increase for the general program, substantial increases were included for the following programs: Mental Health, Mosquito Control, County Health Units, Indigent Hospitalization Program, and the Council on Mental Health Training and Research. For buildings and improvements, new appropriations included an addition of \$125,000 to supplement a \$450,000 building appropriation of the immediate previous Legislature for administrative building space in Jacksonville. There was also a \$70,000 appropriation for air conditioning and improvement of the older buildings in Jacksonville. By separate legislative act, there was a measure carrying an appropriation of \$40,000 to construct and equip additional entomological research facilities at Vero Beach and also a separate legislative act creating an Air Pollution Control Commission within the State Board of Health with a biennial appropriation of \$65,000.

During 1957 the Federal Congress appropriated additional General Health funds for allotment to states for preventive health services to the people of the community, geriatrics, prevention and control of chronic diseases, occupational health and other newer vitally needed health services. Florida's share of the increase amounted to approximately \$70,000. While there was this increase in Federal funds, there was likewise elimination of Federal funds for polio vaccine.

It was also noted during the year that emphasis placed by the agency on Public Health Research resulted in more special demonstrations and research projects. During the year there were twenty separate studies for which grants from varying sources amounted to approximately \$300,000.

There was continued emphasis in the bureau during the year toward simplification of procedures wherever possible and effective July 1, 1957 several work simplification procedures were put into effect. All administrative payrolls were put on IBM punch card equipment. All Federal

allotments were consolidated into one Federal account and deposited with the State Treasurer. County Health Departments were restricted in the collection of fees for services rendered except in those instances where specific legal authority existed. A manual of accounting procedures for collection of fees for services aimed at proper internal control was developed and distributed to County Health Departments. All petty cash funds of doubtful origin in County Health Departments were required to be eliminated and new petty cash funds established with formal accountability.

It was noted in last year's Annual Report that three major building projects were in the planning stage. It is encouraging to note that all three of these projects are now under construction and expected to be completed and occupied during 1958. The Administration Building in Jacksonville is a \$575,000 project, the Dade County Health Center and Laboratory in Miami being built with a combination of local, State and Federal funds will cost in the neighborhood of \$675,000 and the Regional Laboratory in Orlando being constructed with State and Federal funds will cost in the neighborhood of \$165,000.

FISCAL SECTION

BYARD W. HARRIS

The financial transactions of the State Board of Health for the fiscal year ended June 30, 1957 as reflected by the records of the bureau are presented in a condensed form in Tables 51, 52, and 53 and in Figure 10.

A detailed financial report for the fiscal year ended June 30, 1957, has been prepared and distributed to the Governor, members of the State Board of Health, and all bureaus, divisions and county health departments.

The funds received (or appropriated) for the fiscal year ended June 30, 1957, were from the following sources:

State Appropriations and Funds.....	\$ 5,162,782.73	48%
From Local Agencies for County Health Departments	3,622,627.13	33%
From Federal Grants-in-Aid	1,474,874.69	14%
From Private Contributions	133,480.42	1%
From State and Local Sources for Construction of Dade and Orange County Laboratory and Health Center	472,800.20	4%
From Local Agencies for Hospital Services for the Indigent	34,030.08	—
TOTAL	\$10,900,595.25	100%

Objectively, the operating and capital expenditures by the State Board of Health were for:

Personal Services (Salaries and Professional Fees)	\$ 5,977,802.75	54%
Contractual Services (Repairs, Utilities, Travel Expense, Cancer Program—Fees and Hospitalization)	1,687,603.89	15%
Commodities (Office, Medical, Laboratory, Mosquito Control, Educational)	1,694,281.24	15%
Current Charges (Rents, Insurance, Merit System Cost, Registrar Fees)	188,833.22	2%
Capital Outlays (Equipment and Fixed Assets)	329,835.43	3%
Grants to Counties and Mosquito Control Districts	1,202,562.69	10%
Miscellaneous (Education Aids and Subsidies)	82,568.88	1%
TOTAL	\$11,163,488.10	100%

In addition to funds reported in the annual financial report and summarized above, certain other funds and services were made available by the Public Health Service of the U. S. Department of Health, Education and Welfare to activities of the Board but were not paid directly to the State Board of Health. They include:

Value of Public Health Service personnel on loan to the Board in Preventable Disease Program	\$89,049.84
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Fiscal operation followed a budget plan of 132 departmental budgets. These budgets were occasionally revised to meet changing situations.

PURCHASING AND PROPERTY

G. WILSON BALTZELL

During 1957 the purchasing agent received 2482 requisitions for equipment and supplies from the various bureaus and departments, and 2882 purchase orders were issued totaling \$1,526,067.92. In 1957 there were 129 less requisitions received than in 1956, which resulted from restricting the requisitions to cover what they should — equipment and supplies — while other services were treated differently. For instance, printing requirements which can be performed in our duplicating department, are channelled directly to that department on forms recently prescribed for that purpose. Automobile repairs are no longer dealt with by purchase orders.

Likewise, there were 244 less purchase orders issued in 1957 than in 1956, but in dollars and cents the total was \$92,134.62 more in 1957.

Fire insurance on buildings and contents is carried in the State Fire Insurance Fund, supervised by the State Fire Insurance Commissioner.

The State Board of Health carries automobile insurance on its fleet of passenger cars, trucks, trailers and buses. This coverage includes

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Public Liability and Property Damage, Fire, Theft and Comprehensive. During the year our insurance company settled claims for Public Liability and Property Damage amounting to \$3,213.23. However, there is one claim pending, amount of settlement being still undetermined. There was one fire loss to a Mosquito Control truck, but as this resulted from a collision not caused by us, we were compensated in the amount of \$1,000.00 by the offending party's insurance company.

Our company was called on to settle Theft and Comprehensive claims of only \$38.14 for the entire year.

The State Board of Health acts as self-insurer for collision coverage, and in 1957 damages to our cars, which we assumed, amounted to \$566.72. This was \$201.41 less than in 1956, and far below what it would cost to carry collision coverage. Damages to State Board of Health cars caused by others and settled by them amounted to \$362.77.

Under provisions of Section 389.172, Florida Statutes, ownership of fifty-three units was transferred to Mosquito Control Districts in the State. These units consisted of trucks, tractors, draglines, etc. This action relieves the State Board of Health of the expense of maintaining insurance, and places the responsibility of the operation of this equipment directly up to the districts.

Scientific equipment housed in buses and trailers is protected by a "Floater" or transportation policy while being moved from place to place throughout the state. No damages occurred in 1957.

Insurance on boilers and heating equipment is carried in a master boiler policy supervised in the office of the State Fire Insurance Commissioner.

Inventories for non-expendable property are now all processed on IBM cards; this includes equipment in the central office, regional laboratories, Entomological Research Center at Vero Beach and Polk County Arthropod Control at Winter Haven.

During the year, there was created in the Purchasing Department the position of Building Construction Superintendent. This was a most needed position in view of the administrative office addition being constructed. The duties of this position generally require review of plans and specifications and inspection of new construction; represent the agency at bid openings for building construction; design and follow through with alterations of present building facilities; supervise major work orders of various departments of the agency; recommend standards of equipment; recommend use and disposition of real facilities and equipment and other related duties. The person filling this position is expected to maintain close liaison and relationship not only with the Purchasing Agent but also with the Bureau of Finance and Accounts and the State Health Officer.

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BUILDING AND GROUNDS

The building superintendent has the responsibility for the maintenance of buildings and grounds in the Jacksonville area. This comprises headquarters at 1217 Pearl Street, offices at 1023 Liberty Street and 1404 Main Street. A new three story building is now under construction adjacent to the new laboratory building, with completion date estimated to be in the summer of 1958.

DUPLICATING

The duplicating department continues to operate economically and expeditiously. It is a valuable asset to the State Board of Health. To accommodate the increased volume of work a new multilith machine was purchased during the year.

Beginning July 1, 1957 procedure was set up in the Department for recording job numbers, total runs, number of forms reproduced and costs, the supervisor reporting monthly to the director of this bureau.

Care is taken to limit the activities of this department to duplicating. Requirements of the State Board of Health for printing are contracted through commercial printers after complying with the Florida Statutes requiring competitive bids.

TABLE 51

SUMMARY OF RECEIPTS AND DISBURSEMENTS AND BALANCES FOR THE FISCAL YEAR ENDED JUNE 30, 1957 RECEIPTS

FROM STATE FUNDS

From State Appropriations-Operations:	
General Administration	\$ 1,501,207.53
Mental Health	160,172.00
Cancer Control	260,231.00
Consolidated Mosquito Control.....	1,735,274.00
County Health Units	1,250,000.00
Medical Students Scholarships	20,000.00
Dental Students Scholarships	20,000.00
Mental Health Council	125,000.00
Other:	
State Board of Health Trust Fund	885.00
Medical Laboratory Control	780.00
Bedding Inspection Administration	72,253.20
Advisory Hospital Council	1,400.00
Drug Store Inspections	15,580.00
TOTAL STATE FUNDS	\$ 5,162,782.73

TABLE 51 (continued)

FROM FEDERAL GRANT-IN-AID

Public Health Service:	
General Health	\$ 255,478.00
Venereal Disease	121,698.30
Tuberculosis Control	81,902.00
Heart Disease	47,214.48
Cancer Control	47,020.00
Mental Health	79,998.00
U. S. Polio Fund — Program Cost	88,766.00
U. S. Polio Fund — Polio Vaccine	343,829.00
Water Pollution Control	34,571.00
Children's Bureau:	
Maternal and Child Health	374,397.91
TOTAL FEDERAL GRANT-IN-AID	\$ 1,474,874.69

FROM OTHER CONTRIBUTIONS AND SOURCES

Grants and Donations	\$ 133,480.42
Dade County District Laboratory & Health Center Trust	400,001.00
Orange County District Laboratory & Health Center Trust	72,799.20

TOTAL OTHER CONTRIBUTIONS
AND SOURCES

FROM LOCAL AGENCIES FOR COUNTY
HEALTH UNITS

FROM LOCAL AGENCIES FOR HOSPITAL SERVICE
FOR THE INDIGENT

Total Receipts	\$10,900,595.25
Balances July 1, 1956 (Less expired appropriations)	4,100,547.98
Total Receipts and Balances	\$15,001,143.23

DISBURSEMENTS

OPERATING EXPENSE

Personal Services:	
Salaries	\$ 5,890,521.97
Professional Fees and Consultant Services	87,280.78
Contractual Services:	
Travel Expense, including subsistence and lodging	693,235.96
Communication and Transportation of Things	162,324.99
Utilities	49,824.80
Repairs and Maintenance	55,387.46
General Printing and Reproduction Services	33,052.20
Subsistence and Support of Persons	584,545.14
Other Contractual Services	109,233.34

TABLE 51 (continued)

Commodities:	
Bedding, Clothing, Linens and Other Textile Products	917.43
Building and Construction Materials and Supplies	14,701.08
Coal, Fuel Oil and Other Heating Supplies	11,464.59
Educational, Medical, Scientific and Agricultural Materials and Supplies	1,443,306.61
Maintenance Materials and Supplies (Janitorial, etc.)	40,509.83
Motor Fuels and Lubricants	53,893.86
Office Materials and Supplies	123,397.26
Other Materials and Supplies	6,090.58
Current Charges:	
Insurance and Surety Bonds	35,598.35
Rental of Buildings and Equipment	91,857.59
Other Current Charges and Obligations	43,180.10
Merit System	18,197.18
Total Operating Expenses	\$ 9,548,521.10

CAPITAL EXPENSES

Books	\$ 7,151.00
Buildings and Fixed Equipment	57,468.53
Educational, Medical, Scientific and Agricultural Equipment	114,321.21
Motor Vehicles-Passenger	45,183.18
Motor Vehicles-Other	2,707.13
Office Furniture and Equipment	71,925.87
Land	22,939.50
Other Structures and Improvements	7,845.50
Other Capital Outlay	293.51
Total Capital Expenses	\$ 329,835.43

GRANTS, SUBSIDIES AND CONTRIBUTIONS

Grants to Counties and Mosquito Control Districts	\$ 1,202,562.69
Other Educational Aids and Subsidies	82,568.88

Total Grants, Subsidies and Contributions

Total Program Expenses

NON-OPERATING DISBURSEMENTS

Comptroller's 3% Fee Collection	\$ 2,589.27
Transfers	439,833.70
Refunds	145,840.09

Total Non-Operating Disbursements

Total Disbursements

Balance June 30, 1957

Total Disbursements and Balance

TABLE 52
SCHEDULE OF EXPENSES
BY PUBLIC HEALTH PROGRAM ACTIVITY

Health Services to mothers, infants, preschool and school children...	\$ 2,528,680.00
Statewide Venereal Disease Control, Diagnosis and Referral of Infectious Venereal Disease Patients to Treatment Clinics — also Operation of Clinics	745,750.00
Mosquito and Pest Control Programs, Including Pest Control Law Enforcement	2,336,185.77
Statewide Sanitary Engineering and Environmental Sanitation...	965,850.46
Statewide Tuberculosis Control, X-ray Survey and Follow-up Work	858,580.00
Statewide Cancer Control Program	524,070.00
Mental Health Program	445,600.00
Statewide Narcotics, Drug, Medical Practice Law Enforcement...	98,578.59
Industrial Hygiene Program	20,303.43
Heart Disease Program	209,280.00
Building Construction	57,832.04
Polio Program	973,384.32
Other Health Programs and Administration	1,399,393.49
Total Expenses	\$11,163,488.10

SCHEDULE OF EXPENSES
BY FUNCTIONAL ACTIVITY

General Administration and Miscellaneous Training	\$ 616,615.50
Vital Statistics	216,109.50
Health Information	70,553.18
Narcotic Enforcement	75,566.25
Sanitary Engineering	269,113.21
Entomology and Mosquito Control	1,871,694.27
Laboratories	508,047.40
Tuberculosis Control	212,526.48
Preventable Diseases (Excluding Tuberculosis)	260,535.41
Chronic Diseases	309,923.91
Mental Health	146,779.27
Maternal and Child Health	145,990.26
Hospital Services for the Indigent	336,413.41
Local Health Service	170,910.99
Polio Program	973,384.32
Building Construction	57,832.04
County Health Units	4,921,492.70
Total Expenses	\$11,163,488.10

TABLE 52 (continued)
SUMMARY OF TOTAL EXPENSES BY MAJOR FUNCTIONAL
LEVEL

State Level — Organizational Units	
State Funds	\$ 2,113,623.32
Federal Funds	509,649.44
Private Funds	18,508.03
	\$ 2,641,780.79
State Level — Special Services	
State Funds	\$ 2,751,420.44
Federal Funds	822,442.86
Private Funds	26,351.31
	\$ 3,600,214.61
*County Health Units	
State Funds	\$ 1,669,251.05
Local Funds	3,018,915.26
Federal Funds	233,326.39
	\$ 4,921,492.70
GRAND TOTAL	\$11,163,488.10

* Total County Health Units expenditures \$4,921,492.70 represents per capita expenditures of \$1.30 (50¢ State and Federal Funds and 80¢ Local Funds) based on population served by County Health Units of 3,796,300 (1957. Est. Census). For comparison with previous years see 1956 Annual Report, Table 54, page 226; 1955 Annual Report, Table 3, Page 18; 1954 Annual Report, Table 3, Page 16; 1953 Annual Report, Table 3, Page 15; 1952 Annual Report, Table 2, Page 15.

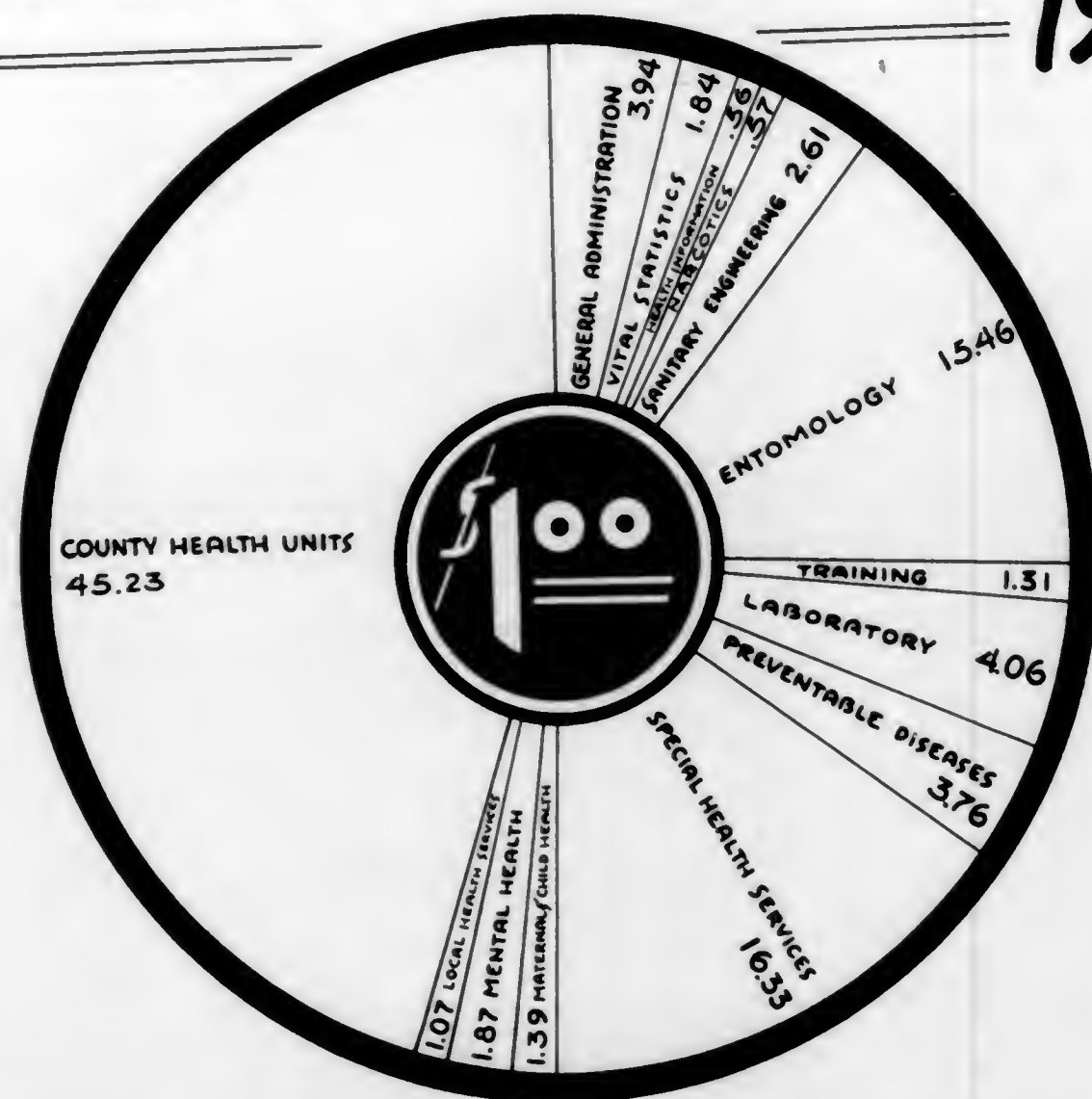
TABLE 53
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND FROM
LOCAL SOURCES FOR THE FISCAL YEAR ENDED JUNE 30, 1957

COUNTY	Total Funds	STATE BOARD OF HEALTH				LOCAL FUNDS				
		Total	State	State Mental Health	Federal	Total	Board of County Commissioners	Board of Public Instruction	Cities	Fees & Miscellaneous
Alachua	\$ 130,162	\$ 38,819	\$ 28,750	\$ 6,844	\$ 3,225	\$ 91,343	\$ 74,379	\$ 5,000	\$ 11,250	\$ 714
Baker	19,806	12,524	7,624	4,900		7,282	6,948	300		34
Bay	67,569	31,763	25,450	6,313		35,806	35,218		2,400	588
Bradford	24,458	13,047	13,047			11,411	6,086	2,800		125
Brevard	56,462	18,685	18,685			37,777	26,565	2,500		8,712
Broward	187,394	48,532	30,583	5,652	12,297	138,862	118,374	17,750	720	2,018
Buwalda	15,406	8,113	8,113			7,293	7,250	3,300	792	43
Calhoun	14,927	6,296	6,296			8,631	4,500	2,600		39
Charlotte	16,326	9,615	7,215	2,400		6,711	4,053		2,400	58
Citrus	30,475	14,924	14,924			15,551	12,987			252
Clay	28,871	17,167	14,334	4,838	995	11,704	11,452			297
Collier	27,681	14,446	14,446			13,235	11,738	1,200		
Columbia	49,740	49,740	49,740			764,940	713,085			51,855
County Health Unit	940,423	175,483	106,737		68,746	764,940	713,085			117
Dade	19,748	12,958	8,385	4,573		5,501	4,923	1,750		123
DeSoto	10,606	5,105	5,105			5,501	4,923	1,000		23
Dixie	144,285	51,379	30,169	12,513	8,697	92,906	73,884	6,000	12,960	6,062
Duval	201,646	52,147	36,790	2,630	12,727	148,499	89,619	6,000	50,425	3,455
Escambia	11,732	4,867	4,867			6,865	6,830			35
Flagler	17,567	6,342	6,342			11,225	11,176	3,930	1,576	49
Franklin	49,134	22,536	21,056	400	1,080	26,598	20,425	3,800		10
Gadsden	9,833	4,285	4,285			5,548	6,806	2,738		5
Gilchrist	10,013	3,202	3,202			6,811	8,838	3,000	300	93
Gulf	23,051	11,120	11,120			11,931	3,175	3,175		106
Hamilton	15,592	8,836	8,836			13,442	12,864	500		78
Hardee	24,346	6,914	6,914			13,442	12,864	500		130
Hendry	13,019	7,076	7,076			5,943	3,305	2,530		108
Hernando	33,630	13,533	13,533			20,097	19,920			177
Hillsborough	597,202	86,657	29,122	12,295	45,240	510,545	410,223	4,640		100,322
Holmes	20,913	11,588	11,588			9,325	4,640	3,000		45
Indian River	28,768	13,639	13,639			15,129	17,205		600	2,775
Jackson	42,894	21,824	21,824			21,070	3,700			123
Jefferson	13,940	8,917	8,917			7,023	3,700			

TABLE 53 (continued)
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND FROM
LOCAL SOURCES FOR THE FISCAL YEAR ENDED JUNE 30, 1957

COUNTY	Total Funds	STATE BOARD OF HEALTH				LOCAL FUNDS				
		Total	State	State Mental Health	Federal	Total	Board of County Commissioners	Board of Public Instruction	Cities	Fees & Miscellaneous
Lafayette	\$ 11,560	\$ 4,760	\$ 4,760			\$ 6,800	\$ 5,000	\$ 1,792	\$ 2,020	\$ 403
Lake	79,633	31,814	31,814			47,819	45,396			891
Lee	43,161	20,786	19,439		\$ 1,347	22,375	21,484	7,795	5,000	3,020
Leon	117,942	49,545	32,263		17,282	68,397	52,582	4,465		66
Levy	22,065	11,523	11,523			10,542	6,011	2,550		9
Liberty	9,714	4,166	4,166			5,548	2,989	3,500		120
Madison	23,053	12,433	12,433		970	10,620	7,000			3,256
Manatee	68,261	29,478	23,414	\$ 5,094		38,783	35,527	4,000		435
Marion	50,172	26,142	26,142			24,080	19,555	500		127
Martin	20,292	10,310	10,310			9,982	9,355	5,000	5,650	133
Monroe	55,228	22,745	22,745			32,483	18,402	4,800	180	571
Nassau	37,617	18,908	18,908			20,515	13,138	5,000		58
Okaloosa	9,579	4,569	4,569			5,010	4,952	15,000	780	14,242
Okechobee	192,818	52,520	38,746	11,074	2,700	140,298	110,276	6,165		587
Orange	20,362	11,210	11,210			9,152	9,152	2,400	40,585	20,661
Oscola	254,060	72,140	47,813	2,400	21,927	181,920	98,259	22,415		793
Palm Beach	22,098	13,305	13,305			352,590	282,248	4,000		70,342
Pasco	434,295	81,705	37,971	10,690	29,138	197,817	174,589	15,221		8,007
Pinellas	248,698	50,881	37,971	2,220		352,590	174,589	15,221		1,051
Polk	39,059	18,640	16,421			19,218	13,799	10,500	4,500	919
Putnam	40,589	21,371	16,421			15,763	11,600	10,500		113
St. Lucie	29,427	13,664	13,664		2,280	48,194	39,052	4,000		5,142
Santa Rosa	76,690	28,496	26,216			19,019	11,480	6,700		358
Sarasota	36,572	17,553	17,553			7,338	3,480	3,500		146
Seminole	17,026	9,688	9,688			11,572	7,750			89
Sumter	24,752	13,180	13,180			8,339	5,531			31
Suwannee	19,170	10,831	10,831			133,804	102,416	14,300		17,088
Taylor	13,105	7,574	7,574			10,929	5,000			18
Union	187,406	53,602	40,717	10,050	2,835	10,929	5,000			129
Volusia	10,891	5,873	5,873			10,305	6,097			88
Wakulla	24,316	13,387	13,387			10,305	6,097			
Walton	22,257	11,952	11,952			10,305	6,097			
Washington										
TOTALS	\$5,211,603	\$1,594,343	\$1,250,000	\$110,016	\$234,327	\$3,617,260	\$2,921,185	\$219,213	\$144,358	\$332,504

the PROPOSED BUDGET for FLORIDA
STATE BOARD of HEALTH DOLLAR ^{FOR} 1958



GENERAL ADMINISTRATION	\$ 544,875	— 3.94¢
VITAL STATISTICS	254,060	— 1.84
HEALTH INFORMATION	77,480	— .56
NARCOTICS	79,320	— .57
SANITARY ENGINEERING	361,650	— 2.61
ENTOMOLOGY	2,142,240	— 15.46
TRAINING	181,300	— 1.31
LABORATORY	563,100	— 4.06
PREVENTABLE DISEASES	521,515	— 3.76
SPECIAL HEALTH SERVICES	2,261,620	— 16.33
MATERNAL & CHILD HEALTH	192,840	— 1.39
MENTAL HEALTH	258,670	— 1.87
LOCAL HEALTH SERVICE	148,840	— 1.07
COUNTY HEALTH UNITS	6,265,162	— 45.23

TOTAL \$ 13,852,672 ONE DOLLAR

**CONTINUED ON
NEXT REEL**



END OF REEL
PLEASE REWIND

